**TEMPLATE INSTRUCTIONS**

The protocol template is a tool to facilitate rapid protocol development. It is not intended to supersede the role of the Protocol Chair in the authoring and scientific development of the protocol. It contains the “boilerplate” language commonly required in protocols submitted to CTEP. Content may be modified as necessary to meet the scientific aims of the study and development of the protocol. Much of the formatting is needed for electronic submission of the protocol to the FDA and should not be changed unless necessary.

1. Each Protocol Template consists of two parts:

a. Protocol Submission Worksheet: available at

<http://ctep.cancer.gov/forms/docs/psw.docx>. This document contains prompts for required administrative information.

b. Main Body and Appendices of the protocol: attached below. This document provides standard language plus instructions and prompts for information.

Please note that the Informed Consent Template is provided as a separate document file.

2. The Protocol Submission Worksheet and Protocol/Informed Consent Template documents should be completed, and all documents (including the Appendices) should be submitted to CTEP for review. For protocol amendments a Summary of Changes should be provided as the first page (page i) of the document, as indicated in the template. The Summary of Changes must provide hyperlinks to the area referenced in the protocol or informed consent document.

3. All sections in the Protocol Template should be retained to facilitate rapid review. If not appropriate for a given study, please insert “Not Applicable” after the section number and delete unneeded text. Depending on the phase of the study and whether it is a single-agent or combination agent study, include sections as follows:

* No highlighting – for all protocols
* Yellow highlighting – for phase 1 protocols
* Green highlighting – for phase 2 protocols
* Blue highlighting – for combination agent protocols
* Pink highlighting – for advanced imaging protocols

4. All Protocol Template instructions and prompts are in *italics*. **As you complete the information requested, please delete the italicized text.**

5. Please note that the Protocol Template has built-in styles for headings levels 1-4 (Level 1 Heading – Level 4 Heading; see image below).

Doc3.tiff

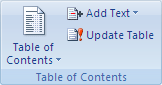
These heading styles will automatically update the Table of Contents (TOC) and convert to Bookmarks in a final PDF protocol document. **Please retain the heading styles.**

6. Before updating the TOC, please ensure that the **Title Page** is page 1 of the protocol. For any pages preceding it (*i.e.*, Summary of Changes) use alternative numbering (i, ii, iii, iv, … ). Use Section Breaks as necessary to preserve this numbering scheme.

7. To update the TOC in your protocol document:

2007 & 2010 MS Word

a. On the **References** tab, in the **Table of Contents** group, click **Update Table**.



b. Click **Update entire table**.

2003 MS Word

a. Click the table of contents.

b. Press F9.

**Please do not edit the TOC manually.**

8. Please redline, highlight or underline new or modified text as this will facilitate rapid review.

9. Note that CTEP cannot accept MS Word files that:

* are read-only
* are password protected
* contain macros
* are saved with a file extension other than .doc (Word 2003) or .docx (Word 2007/10)

10. For problems or questions encountered when using these documents (Protocol Submission Worksheet or Protocol/Informed Consent Template), please contact the CTEP Protocol and Information Office (PIO) by e-mail ([pio@ctep.nci.nih.gov](mailto:pio@ctep.nci.nih.gov)).

**SUMMARY OF CHANGES – Protocol**

For Protocol Amendment # to:

NCI Protocol #:

Local Protocol #:

NCI Version Date:

Protocol Date:

*Please provide a list of changes from the previous CTEP approved version of the protocol. The list shall identify by page and section each change made to a protocol document with hyperlinks to the section in the protocol document. All changes shall be described in a point-by-point format (i.e., Page 3, section 1.2, replace ‘xyz’ and insert ‘abc’). When appropriate, a brief justification for the change should be included.*

| **#** | **Section** | **Page(s)** | **Change** |
| --- | --- | --- | --- |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |
| 5. |  |  |  |

*(Please retain the section break below, so that the Title Page is page “1” of the document.)*

**NCI Protocol #:** *To be assigned by the NCI for ETCTN studies.*

**Local Protocol #:** *Please insert your local protocol # for this study.*

**ClinicalTrials.gov Identifier:** *[Insert ClinicalTrials.gov NCT#, if known, in the format “NCTxxxxxxxx; otherwise, “TBD”]*

**TITLE:** A Phase 1 Study of *or* A Phase 2 Study of *[CTEP and/or CIP IND Agent]* in Combination with *[Other Agent*(s)*]* in *[Solid Tumors/Study Disease]*

*Use Simplified Disease Classification (SDC) terminology for study disease. Please refer to the CTEP Web site (*[*http://ctep.cancer.gov/protocolDevelopment/codes\_values.htm*](http://ctep.cancer.gov/protocolDevelopment/codes_values.htm)*) for a complete list of SDC disease terms.*

**Corresponding Organization:** *Name of the grant or contract-level organization (Phase 1 Lead Academic Organization [LAO] or Phase 2 Consortium [P2C]) submitting the protocol. Please select from the table of LAOs and P2Cs below.*

**Principal Investigator:** *Name*

*Institution*

*Address*

*Address*

*Telephone*

*Fax*

*e-mail address*

***A study can have only one Principal Investigator. The Principal Investigator must be a physician and is responsible for all study conduct.*** *Please refer to the Investigator's Handbook on the CTEP Web site for a complete description of the* ***Principal Investigator's*** *responsibilities (*[*http://ctep.cancer.gov/investigatorResources/default.htm#Investigators\_handbook*](http://ctep.cancer.gov/investigatorResources/default.htm#Investigators_handbook)*).*

*The protocol title page of the ETCTN Rostered Model template lists all grantees and/or contractors that may potentially participate on an ETCTN protocol.* ***It is the responsibility of the Corresponding Organization to delete the rows of the LAO (UM1) grantees or P2C (N01) contractors that will not be participating on this study from the table below.*** *Non-ETCTN single institution participants should be added under “Non-Member Collaborators” according to the formatted example. Non-ETCTN rostered organization participants (e.g., ALLIANCE, ECOG-ACRIN, NRG, SWOG, COG, NCIC-CTG, CITN, BMTCTN, ABTC, PBTC, AMC, COGC) should be added under “Participating Organizations” as indicated below.*

**Participating Organizations** *(If an LAO grantee or P2C contractor is not participating on this trial, delete row(s) from table.)*

|  |
| --- |
| **LAO-11030** / University Health Network Princess Margaret Cancer Center LAO |
| **LAO-CA043** / City of Hope Comprehensive Cancer Center LAO |
| **LAO-IL057** / University of Chicago Comprehensive Cancer Center LAO |
| **LAO-MA036** / Dana-Farber - Harvard Cancer Center LAO |
| **LAO-MD017** / JHU Sidney Kimmel Comprehensive Cancer Center LAO |
| **LAO-CT018** / Yale University Cancer Center LAO |
| **LAO-MN026** / Mayo Clinic Cancer Center LAO |
| **LAO-NC010** / Duke University - Duke Cancer Institute LAO |
| **LAO-NJ066** / Rutgers University - Cancer Institute of New Jersey LAO |
| **LAO-OH007** / Ohio State University Comprehensive Cancer Center LAO |
| **LAO-PA015** / University of Pittsburgh Cancer Institute LAO |
| **LAO-TX035** / University of Texas MD Anderson Cancer Center LAO |
| **LAO-NCIDTC** / National Cancer Institute Developmental Therapeutics Clinic LAO |
| **P2C-11030** / University Health Network Princess Margaret Cancer Center P2C |
| **P2C-CA189** / University of California Davis Comprehensive Cancer Center P2C |
| **P2C-FL065** / H Lee Moffitt Cancer Center P2C |
| **P2C-IL057** / University of Chicago Comprehensive Cancer Center P2C |
| **P2C-MN026** / Mayo Clinic Cancer Center P2C |
| **P2C-OH007** / Ohio State University Comprehensive Cancer Center P2C |
| **P2C-TX035** / University of Texas M D Anderson Cancer Center P2C |
| *Other Participating Rostered Organization #1 (e.g., ALLIANCE, ECOG-ACRIN, NRG, SWOG, COG, NCIC-CTG, CITN, BMTCTN, ABTC, PBTC, AMC, or COGC; list one organization per row; add more rows as necessary)* |

**Non-Member Collaborators** *(individual treating sites that are not members of a participating rostered organization)*

|  |  |
| --- | --- |
| *Institution #1 (non-rostered institution; insert more rows below as necessary for additional institutions)*  *Name*  *Address* | *Investigator #1*  *Name*  *Telephone*  *Fax*  *E-mail address*  *Investigator #2*  *Name*  *Telephone*  *Fax*  *E-mail address*  *Investigator #3*  *Name*  *Telephone*  *Fax*  *E-mail address* |

***The Principal Investigator and all physicians responsible for patient care must have a current FDA Form 1572, Supplemental Investigator Data Form (SIDF), Financial Disclosure Form (FDF), and CV on file with CTEP.*** *Failure to register all appropriate individuals could delay protocol approval. If you are unsure of an investigator's status, please contact the Pharmaceutical Management Branch, CTEP at (240) 276-6575 or by e-mail at* [*PMBRegPend@ctep.nci.nih.gov*](mailto:PMBRegPend@ctep.nci.nih.gov)*. Please indicate, on the title page, if an Associate Investigator is NOT responsible for patient care and therefore does not require a current 1572, SIDF, FDF, and CV on file.*

*If this study includes an investigational agent supplied by the NCI Division of Cancer Treatment and Diagnosis and will involve a Canadian institution(s), a Clinical Trials Application (CTA) will need to be submitted to the Canadian Health Products and Food Branch (HPFB) for their participation in the study. A Canadian investigator should be designated to be responsible for preparing and submitting the CTA to the Canadian HPFB for the Canadian institution(s). Procedures and forms for preparing and submitting a CTA to the Canadian HPFB are available at* [*http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/clini/cta\_application-eng.php*](http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/clini/cta_application-eng.php)*. A copy of the “No Objection” letter should be forwarded to the Pharmaceutical Management Branch at* [*PMBAfterHours@mail.nih.gov*](mailto:PMBAfterHours@mail.nih.gov) *when available.*

**Statistician:****Study Coordinator:**

*(if applicable) (if applicable)*

*Name Name*

*Address Address*

*Address Address*

*Telephone Telephone*

*Fax Fax*

*e-mail address e-mail address*

**Responsible Research Nurse: Responsible Data Manager:**

*Name Name*

*Address Address*

*Address Address*

*Telephone Telephone*

*Fax Fax*

*e-mail address e-mail address*

*Please list all agents and their suppliers in the fields below, including any imaging agents. “Supplier” is defined as the entity that provides the clinical supply of the agent.  If the agent is purchased through commercial sources, then please mark supplier as “commercial”.*

**NCI-Supplied Agent(s):** *[Agent Name and NSC #]*

**Other Agent(s):** *[Agent Name, NSC # (if applicable), and Supplier]*

*Below, please describe the IND Status of this study by choosing IND #/Sponsor* ***OR*** *Exemption from IND requirements, making sure to delete the inapplicable field(s).*

**IND #:** *[Enter the # of the IND under which this study will be performed. Enter “TBD” if an IND # is not yet available.]*

**IND Sponsor:** *[If this study is being conducted under an IND sponsored by CTEP, then enter “DCTD, NCI”. If this is solely an imaging study and is to be conducted under a CIP IND, then enter “Cancer Imaging Program, NCI”]*

*OR*

**Study Exempt from IND Requirements per 21 CFR 312.2(b).**

*If an IDE is not applicable to this study, then please delete the following fields (IDE #, IDE Sponsor, Device Name):*

**IDE #:** *[Investigational Device Exemption #]*

**IDE Sponsor**:

**Device Name:** *[This can include investigational* in vitro *diagnostics, which are regulated as devices]*

**Protocol Type / Version # / Version Date:** *[Type\* / Version # / Version Date]*

*\*Protocol types: Original, Revision, or Amendment*

# SCHEMA

*Please provide a schema for the study. If preferred, a summary or synopsis may be provided.*

*For phase 1 single-agent protocols:*

|  |  |
| --- | --- |
| **Dose Escalation Schedule** | |
| **Dose Level** | Dose of *[CTEP IND Agent]\** |
| Level 1 |  |
| Level 2 |  |
| Level 3 |  |
| Level 4 |  |
| Level 5 |  |
| *\* Doses are stated as exact dose in units (*e.g.*, mg/m2, mcg/kg, etc.) rather than as a percentage.* | |

*For phase 1 combination protocols:*

|  |  |  |  |
| --- | --- | --- | --- |
| **Dose Escalation Schedule** | | | |
| **Dose Level** | **Dose\*** | | |
| ***Agent X***  ***(units)*** | ***Agent Y***  ***(units)*** | ***Agent Z***  ***(units)*** |
| Level 1 |  |  |  |
| Level 2 |  |  |  |
| Level 3 |  |  |  |
| Level 4 |  |  |  |
| Level 5 |  |  |  |
| *\*Doses are stated as exact dose in units (*e.g.*, mg/m2, mcg/kg, etc.) rather than as a percentage.* | | | |

*For phase 2 single-agent or combination protocols, provide study-specific schema or synopsis.*

*Please indicate when advanced imaging will be performed in the study.*

**TABLE OF CONTENTS**

[SCHEMA 5](#_Toc393701315)

[1. OBJECTIVES 8](#_Toc393701316)

[1.1 Primary Objectives 8](#_Toc393701317)

[1.2 Secondary Objectives 8](#_Toc393701318)

[2. BACKGROUND 8](#_Toc393701319)

[2.1 *Study Disease(s)* 8](#_Toc393701320)

[2.2 CTEP and/or CIP IND Agent(s) 8](#_Toc393701321)

[2.3 *Other Agent(s)* 9](#_Toc393701322)

[2.4 Rationale 9](#_Toc393701323)

[2.5 Correlative Studies Background 9](#_Toc393701324)

[3. PATIENT SELECTION 9](#_Toc393701325)

[3.1 Eligibility Criteria 9](#_Toc393701326)

[3.2 Exclusion Criteria 11](#_Toc393701327)

[3.3 Inclusion of Women and Minorities 12](#_Toc393701328)

[4. REGISTRATION PROCEDURES (Rostered Protocol Model) 13](#_Toc393701329)

[4.1 Investigator and Research Associate Registration with CTEP 13](#_Toc393701330)

[4.2 Site Registration 14](#_Toc393701331)

[4.3 Patient Registration 15](#_Toc393701332)

[4.4 General Guidelines 17](#_Toc393701333)

[5. TREATMENT AND/OR IMAGING PLAN 17](#_Toc393701334)

[5.1 Agent Administration 17](#_Toc393701335)

[5.2 *For phase 1 protocols only:* Definition of Dose-Limiting Toxicity 19](#_Toc393701336)

[5.3 General Concomitant Medication and Supportive Care Guidelines 20](#_Toc393701337)

[5.4 Duration of Therapy 21](#_Toc393701338)

[5.5 Duration of Follow Up 21](#_Toc393701339)

[5.6 Criteria for Removal from Study 21](#_Toc393701340)

[6. DOSING DELAYS/DOSE MODIFICATIONS 21](#_Toc393701341)

[7. ADVERSE EVENTS: LIST AND REPORTING REQUIREMENTS 24](#_Toc393701342)

[7.1 Comprehensive Adverse Events and Potential Risks List(s) (CAEPRs) 24](#_Toc393701343)

[7.2 Adverse Event Characteristics 25](#_Toc393701344)

[7.3 Expedited Adverse Event Reporting 26](#_Toc393701345)

[7.4 Routine Adverse Event Reporting 31](#_Toc393701346)

[7.5 Secondary Malignancy 31](#_Toc393701347)

[7.6 Second Malignancy 32](#_Toc393701348)

[8. PHARMACEUTICAL and/or IMAGING AGENT INFORMATION 32](#_Toc393701349)

[8.1 CTEP and/or CIP IND Agent(s) 32](#_Toc393701350)

[8.2 *Other Investigational Agent(s)* 34](#_Toc393701351)

[8.3 *Commercial Agent(s)* 35](#_Toc393701352)

[9. BIOMARKER, CORRELATIVE, AND SPECIAL STUDIES 35](#_Toc393701353)

[9.1 Integral Laboratory or Imaging Studies 37](#_Toc393701354)

[9.2 Investigational Device Information 37](#_Toc393701355)

[9.3 Integrated Correlative Studies 37](#_Toc393701356)

[9.4 Exploratory/Ancillary Correlative Studies 38](#_Toc393701357)

[9.5 Special Studies 38](#_Toc393701358)

[10. STUDY CALENDAR 39](#_Toc393701359)

[11. MEASUREMENT OF EFFECT 40](#_Toc393701360)

[11.1 Antitumor Effect – Solid Tumors 40](#_Toc393701361)

[11.2 Antitumor Effect – Hematologic Tumors 47](#_Toc393701362)

[11.3 Other Response Parameters 47](#_Toc393701363)

[12. DATA REPORTING / REGULATORY REQUIREMENTS 47](#_Toc393701364)

[12.1 Data Reporting 47](#_Toc393701365)

[12.2 CTEP Multicenter Guidelines 49](#_Toc393701366)

[12.3 Collaborative Agreements Language 50](#_Toc393701367)

[13. STATISTICAL CONSIDERATIONS 52](#_Toc393701368)

[13.1 Study Design/Endpoints 52](#_Toc393701369)

[13.2 Sample Size/Accrual Rate 52](#_Toc393701370)

[13.3 Stratification Factors 53](#_Toc393701371)

[13.4 Analysis of Secondary Endpoints 53](#_Toc393701372)

[13.5 *For phase 2 protocols only:* Reporting and Exclusions 54](#_Toc393701373)

[14. Study Status Updates and Study Closure 54](#_Toc393701374)

[14.1 Definitions of Study Status Changes 54](#_Toc393701375)

[14.2 Responsibility for Filing Protocol Status Update Forms 56](#_Toc393701376)

[REFERENCES 58](#_Toc393701377)

[APPENDIX A PERFORMANCE STATUS CRITERIA 59](#_Toc393701378)

[APPENDIX B CTEP MULTICENTER GUIDELINES FOR NON-ETCTN TRIALS 60](#_Toc393701379)

[APPENDIX C INFORMATION ON POSSIBLE DRUG INTERACTIONS 62](#_Toc393701380)

[APPENDIX D BIOASSAY TEMPLATES 65](#_Toc393701381)

# OBJECTIVES

## Primary Objectives

*Please insert primary protocol objectives.*

*Please specify advanced imaging Primary Objective if applicable.*

## Secondary Objectives

* + 1. *[All phase 1 studies must include the following text as a secondary objective.]* To observe and record anti-tumor activity. Although the clinical benefit of [this/these] drug(s) has not yet been established, the intent of offering this treatment is to provide a possible therapeutic benefit, and thus the patient will be carefully monitored for tumor response and symptom relief in addition to safety and tolerability.

*Please insert additional secondary protocol objectives, if pertinent.*

*Please specify advanced imaging Secondary/Exploratory Objective if applicable.*

# BACKGROUND

## *Study Disease(s)*

*For phase 1 or 2 disease-specific studies, please provide background information on the study disease.*

## CTEP and/or CIP IND Agent(s)

*Please provide background information below on the CTEP and/or CIP IND study agent(s), including information to support safety issues and the rationale for the proposed starting dose, dose escalation scheme, and regimen chosen. Please also provide information on the mechanism of action, summaries of nonclinical and clinical studies, nonclinical and clinical pharmacokinetics, and major route of elimination. If available, please include information on the metabolism of the study agent in humans and its potential for drug interactions, if any interactions (*e.g.*, via the P450 enzyme system).* *If protocol is a single-agent study, please insert background information directly under heading 2.2 and remove subheadings 2.2.1, 2.2.2, etc., for multiple-agent studies.*

*Please include information regarding the rationale for advanced imaging as appropriate; include information on the pharmacology, toxicology, and previous human imaging studies from the current Investigator’s Brochure as applicable*. ***For complete information, please refer to the current Investigator’s Brochure:*** *[Insert title, version and date of NCI/CIP IB]. Contact CIP regulatory staff at* [*NCICIPINDAGENTS@mail.nih.gov*](mailto:NCICIPINDAGENTS@mail.nih.gov) *for the current Investigator’s Brochure.*

* + 1. *CTEP and/or CIP IND Agent #1*
    2. *CTEP and/or CIP IND Agent #2*

## *Other Agent(s)*

*Please provide background information on other agent(s) and/or treatments in this study, including information to support safety issues and the rationale for the proposed starting dose and dose escalation scheme, if applicable.*

## Rationale

*Please provide the background and rationale for this therapy/combination therapy/advanced imaging (in this disease).*

## Correlative Studies Background

*Please provide background information on each planned correlative study including the biologic rationale and hypothesis as well as the relevant preclinical and clinical (if available) data. Refer to “Guidelines for Correlative Studies in Clinical Trials” (*[*http://ctep.cancer.gov/protocolDevelopment/templates\_applications.htm*](http://ctep.cancer.gov/protocolDevelopment/templates_applications.htm)*). If this trial includes no correlative studies, this section should be marked “N/A”.*

# PATIENT SELECTION

## Eligibility Criteria

* + 1. *For phase 1 protocols:* Patients must have histologically confirmed malignancy that is metastatic or unresectable and for which standard curative or palliative measures do not exist or are no longer effective.

*OR*

Patients must have histologically or cytologically confirmed *[Study Disease]*

*Please specify eligible disease(s)/stage(s) using the CTEP Simplified Disease Classification (*[*http://ctep.cancer.gov/protocolDevelopment/codes\_values.htm*](http://ctep.cancer.gov/protocolDevelopment/codes_values.htm)*).*

* + 1. *For phase 2 protocols:* Please insert appropriate criteria for the particular patient population. Note: Lesions are either measurable or non-measurable using the criteria provided in section 11. The term “evaluable” in reference to measurability will not be used because it does not provide additional meaning or accuracy. Suggested text is provided below.

Patients must have measurable disease, defined as at least one lesion that can be accurately measured in at least one dimension (longest diameter to be recorded for non-nodal lesions and short axis for nodal lesions) as ≥20 mm (≥2 cm) with conventional techniques or as ≥10 mm (≥1 cm) with spiral CT scan, MRI, or calipers by clinical exam. See Section 11 for the evaluation of measurable disease.

*OR*

*Please insert appropriate criteria for diseases other than solid tumors. Criteria for selected hematologic malignancies can be found in the following references: J Clin Oncol 17(4):1244-53, 1999 (non-Hodgkin's lymphoma); J Clin Oncol 8(5):813-19, 1990 (acute myeloid leukemia); and Blood 887(12):4990-97, 1996 (chronic lymphocytic leukemia).*

* + 1. *Please state allowable type and amount of prior therapy. Define as appropriate any limitations on prior therapy and the time from last prior regimen (e.g., no more than 6 cycles of an alkylating agent; no more than 450 mg/m2 doxorubicin for agents with expected cumulative cardiotoxicity). Include separate definitions for duration as needed (e.g., at least 4 weeks since prior chemotherapy or radiation therapy, 6 weeks if the last regimen included BCNU or mitomycin C). Include site/total dose for prior radiation exposure as needed (e.g., no more than 3000 cGy to fields including substantial marrow).*
    2. Age ≥18 years. *Please state reason for age restriction. If applicable, the following text can be used.*

Because no dosing or adverse event data are currently available on the use of *[CTEP and/or CIP IND Agent]* in combination with *[other agents]* in patients <18 years of age, children are excluded from this study, but will be eligible for future pediatric trials.

* + 1. ECOG performance status ≤2 (Karnofsky ≥60%, see Appendix A).
    2. Life expectancy of greater than *[#weeks or months]*
    3. Patients must have normal organ and marrow function as defined below:
* leukocytes ≥3,000/mcL
* absolute neutrophil count ≥1,500/mcL
* platelets ≥100,000/mcL
* total bilirubin within normal institutional limits
* AST(SGOT)/ALT(SGPT) ≤2.5 × institutional upper limit of normal
* creatinine within normal institutional limits

OR

* creatinine clearance ≥60 mL/min/1.73 m2 for patients with creatinine levels above institutional normal.
  + 1. *Please insert other appropriate eligibility criteria.*
    2. *Please use or modify the following paragraph as appropriate.*

The effects of *[CTEP and/or CIP IND Agent]* on the developing human fetus are unknown. For this reason and because *[Agent Class]* agents as well as other therapeutic agents used in this trial are known to be teratogenic, women of child-bearing potential and men must agree to use adequate contraception (hormonal or barrier method of birth control; abstinence) prior to study entry and for the duration of study participation. Should a woman become pregnant or suspect she is pregnant while she or her partner is participating in this study, she should inform her treating physician immediately. Men treated or enrolled on this protocol must also agree to use adequate contraception prior to the study, for the duration of study participation, and 4 months after completion of *[CTEP and/or CIP IND Agent]* administration.

* + 1. Ability to understand and the willingness to sign a written informed consent document.

## Exclusion Criteria

* + 1. Patients who have had chemotherapy or radiotherapy within 4 weeks (6 weeks for nitrosoureas or mitomycin C) prior to entering the study or those who have not recovered from adverse events due to agents administered more than 4 weeks earlier.
    2. Patients who are receiving any other investigational agents.
    3. Patients with known brain metastases should be excluded from this clinical trial because of their poor prognosis and because they often develop progressive neurologic dysfunction that would confound the evaluation of neurologic and other adverse events.
    4. History of allergic reactions attributed to compounds of similar chemical or biologic composition to *[CTEP and/or CIP IND Agent(s)]* or other agents used in study.
    5. *Please state appropriate exclusion criteria relating to concomitant medications or substances that have the potential to affect the activity or pharmacokinetics of the study agent(s). Examples of such agents or substances include those that interact through the CYP450 isoenzyme system or other sources of drug interactions (e.g., P-glycoprotein). Specifically excluded substances may be listed below, stated in Section 8 (Pharmaceutical Information), and presented as an appendix. If appropriate, the following text concerning CYP450 interactions may be used or modified.*

Patients receiving any medications or substances that are inhibitors or inducers of *[specify CYP450 enzyme(s)]* are ineligible. Because the lists of these agents are constantly changing, it is important to regularly consult a frequently-updated list such as <http://medicine.iupui.edu/clinpharm/ddis/>; medical reference texts such as the Physicians’ Desk Reference may also provide this information. As part of the enrollment/informed consent procedures, the patient will be counseled on the risk of interactions with other agents, and what to do if new medications need to be prescribed or if the patient is considering a new over-the-counter medicine or herbal product. *[Appendix C is a sample patient information sheet that can be tailored to this specific protocol and presented to the patient*.*]*

* + 1. Uncontrolled intercurrent illness including, but not limited to, ongoing or active infection, symptomatic congestive heart failure, unstable angina pectoris, cardiac arrhythmia, or psychiatric illness/social situations that would limit compliance with study requirements.
    2. *The investigator(s) must state a medical or scientific reason if pregnant or nursing patients will be excluded from the study. The full text of the Policies, Guidelines, and Procedures pertinent to this requirement is available on the CTEP Web site (*[*http://ctep.cancer.gov/protocolDevelopment/policies\_pregnant.htm*](http://ctep.cancer.gov/protocolDevelopment/policies_pregnant.htm)*). Suggested text is provided below:*

Pregnant women are excluded from this study because *[CTEP and/or CIP IND Agent]* is *[a/an Agent Class]* agent with the potential for teratogenic or abortifacient effects. Because there is an unknown but potential risk for adverse events in nursing infants secondary to treatment of the mother with *[CTEP and/or CIP IND Agent],* breastfeeding should be discontinued if the mother is treated with *[CTEP and/or CIP IND Agent]*. These potential risks may also apply to other agents used in this study.

* + 1. *The investigator(s) must state a medical or scientific reason if patients who are cancer survivors or those who are HIV positive will be excluded from the study. The full text of the Policies, Guidelines, and Procedures pertinent to this requirement is available on the CTEP Web site (*[*http://ctep.cancer.gov/protocolDevelopment/policies\_hiv.htm*](http://ctep.cancer.gov/protocolDevelopment/policies_hiv.htm)*). Suggested text is provided below:*

HIV-positive patients on combination antiretroviral therapy are ineligible because of the potential for pharmacokinetic interactions with *[CTEP and/or CIP IND Agent(s)]*. In addition, these patients are at increased risk of lethal infections when treated with marrow-suppressive therapy. Appropriate studies will be undertaken in patients receiving combination antiretroviral therapy when indicated.

* + 1. *Please insert other appropriate agent-specific exclusion criteria.*

## Inclusion of Women and Minorities

NIH policy requires that women and members of minority groups and their subpopulations be included in all NIH-supported biomedical and behavioral research projects involving NIH-defined clinical research unless a clear and compelling rationale and justification establishes to the satisfaction of the funding Institute & Center (IC) Director that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research. Exclusion under other circumstances must be designated by the Director, NIH, upon the recommendation of an IC Director based on a compelling rationale and justification. Cost is not an acceptable reason for exclusion except when the study would duplicate data from other sources. Women of childbearing potential should not be routinely excluded from participation in clinical research. Please see <http://grants.nih.gov/grants/funding/phs398/phs398.pdf>.

*Describe the planned distribution of subjects by sex/gender, race, and ethnicity for each proposed study and complete the format in the Planned Enrollment Report (table provided under Section 13.2).*

# REGISTRATION PROCEDURES (Rostered Protocol Model)

*Suggested text is provided below which may be modified as necessary. Appropriate patient screening and enrollment forms for the study (*e.g.*, Eligibility Screening Worksheet, Registration Form) should be developed and included with the protocol. Cancer Data Standards Registry and Repository (caDSR)-compliant versions of these forms will be created and downloaded into the Oncology Patient Enrollment Network (OPEN) to facilitate 24/7 patient enrollment access by all participating institutions.*

## Investigator and Research Associate Registration with CTEP

* + 1. CTEP Registration Procedures

Food and Drug Administration (FDA) regulations and National Cancer Institute (NCI) policy require all investigators participating in any NCI-sponsored clinical trial to register and to renew their registration annually.

Registration requires the submission of:

* a completed ***Statement of Investigator Form*** (FDA Form 1572) with an original signature
* a current Curriculum Vitae (CV)
* a completed and signed ***Supplemental Investigator Data Form*** (IDF)
* a completed ***Financial Disclosure Form*** (FDF) with an original signature

Fillable PDF forms and additional information can be found on the CTEP website at <http://ctep.cancer.gov/investigatorResources/investigator_registration.htm>. For questions, please contact the ***CTEP Investigator Registration Help Desk*** by email at [pmbregpend@ctep.nci.nih.gov](mailto:pmbregpend@ctep.nci.nih.gov).

* + 1. CTEP Associate Registration Procedures / CTEP-IAM Account

The Cancer Therapy Evaluation Program (CTEP) Identity and Access Management (IAM) application is a web-based application intended for use by both Investigators (i.e., all physicians involved in the conduct of NCI-sponsored clinical trials) and Associates (i.e., all staff involved in the conduct of NCI-sponsored clinical trials).

Associates will use the CTEP-IAM application to register (both initial registration and annual re-registration) with CTEP and to obtain a user account.

Investigators will use the CTEP-IAM application to obtain a user account only. (See CTEP Investigator Registration Procedures above for information on registering with CTEP as an Investigator, which must be completed before a CTEP-IAM account can be requested.)

An active CTEP-IAM user account is needed to access all CTEP and CTSU (Cancer Trials Support Unit) websites and applications, and is critical to the conduct of this study, including document access, patient enrollment, and clinical data submission.

Additional information can be found on the CTEP website at <http://ctep.cancer.gov/branches/pmb/associate_registration.htm>. For questions, please contact the ***CTEP Associate Registration Help Desk*** by email at [ctepreghelp@ctep.nci.nih.gov](mailto:ctepreghelp@ctep.nci.nih.gov).

* + 1. For Questions and Support

For questions about Investigator Registration, please contact the CTEP Investigator Registration Help Desk: [pmbregpend@ctep.nci.nih.gov](mailto:pmbregpend@ctep.nci.nih.gov).

For questions about Associate Registration or CTEP-IAM Account Creation, please contact the CTEP Registration Help Desk: [ctepreghelp@ctep.nci.nih.gov](mailto:ctepreghelp@ctep.nci.nih.gov).

## Site Registration

This study is supported by the NCI Cancer Trials Support Unit (CTSU).

Each investigator or group of investigators at a clinical site must obtain Institutional Review Board (IRB) approval for this protocol and submit all required regulatory documents (including any protocol specific documents) to the CTSU Regulatory Office before they can be approved to enroll patients.

The CTSU Regulatory Office tracks receipt of these documents in the CTSU Regulatory Support System (RSS), reviews for compliance, and transmits site approval data to CTEP.

*Keep the following paragraph for protocols reviewed by the Central IRB (CIRB)-Early Phase Emphasis (EPE):*

Sites participating on the NCI CIRB initiative and accepting CIRB approval for the study are not required to submit separate IRB approval documentation to the CTSU Regulatory Office for initial, continuing, or amendment review.  This information will be provided to the CTSU Regulatory Office from the CIRB at the time the site’s Signatory Institution accepts the CIRB approval.  The Signatory site may be contacted by the CTSU Regulatory Office or asked to complete information verifying the participating institutions on the study.  Other site registration requirements (*i.e.*, laboratory certifications, protocol-specific training certifications, or modality credentialing) must be submitted to the CTSU Regulatory Office or compliance communicated per protocol instructions.

* + 1. Downloading Regulatory Documents

Site registration forms may be downloaded from the *[NCI protocol #]* protocol page located on the CTSU Web site. Permission to view and download this protocol is restricted and is based on person and site roster data housed in the CTSU RSS. To participate, Investigators and Associates must be associated with the Corresponding or Participating protocol organization in the RSS.

* Go to <https://www.ctsu.org> and log in using your CTEP IAM username and password
* Click on the Protocols tab in the upper left of your screen
* Click on the ETCTN link to expand, then select *[Phase 1 Grants or Phase 2 Consortia depending on which program is leading the trial],* followed by *[Corresponding Organization]*, and protocol #*[NCI Protocol #]*
* Click on LPO Documents, select the Site Registration documents link, and download and complete the forms provided. (Note: For sites under the CIRB initiative, IRB data will automatically load to RSS.)
  + 1. Submitting Regulatory Documents

Submit completed forms along with a copy of your IRB Approval *(and if applicable,* Model Informed Consent) to the CTSU Regulatory Office, where they will be entered and tracked in the CTSU RSS.

CTSU Regulatory Office

1818 Market Street, Suite 1100

Philadelphia, PA 19103

Phone: 1-866-651-2878

Fax: 215-569-0206

E-mail: [CTSURegulatory@ctsu.coccg.org](mailto:CTSURegulatory@ctsu.coccg.org) (for regulatory document submission only)

* + 1. Checking **Site** Registration Status

Sites can check the status of their registration packets by querying the Site Registration subtab of the members’ section of the CTSU Web site. (Note: Sites will not receive formal notification of regulatory approval from the CTSU Regulatory Office.)

* Go to <https://www.ctsu.org> and log in using your CTEP IAM username and password.
* Click on the Regulatory tab at the top of your screen.
* Click on the Site Registration subtab.
* Enter your 5-character CTEP Institution Code and click on Go.

Note: If possible, please allow three working days for site registration approval before attempting to enroll your first patient.

## Patient Registration

* + 1. OPEN / IWRS

Patient enrollment will be facilitated using the Oncology Patient Enrollment Network (OPEN). OPEN is a web-based registration system available to users on a 24/7 basis. It is integrated with the CTSU Enterprise System for regulatory and roster data interchange and with the Theradex Interactive Web Response System (IWRS) for retrieval of patient registration/randomization assignment. Patient enrollment data entered by Registrars in OPEN / IWRS will automatically transfer to the NCI’s clinical data management system, Medidata Rave.

For trials with slot reservation requirements, OPEN will connect to IWRS at enrollment initiation to check slot availability. Registration staff should ensure that a slot is available and secured for the patient before completing an enrollment.

The OPEN system will provide the site with a printable confirmation of registration and treatment information.  Please print this confirmation for your records.

* + 1. OPEN/IWRS User Requirements

OPEN/IWRS users must meet the following requirements:

* Have a valid CTEP-IAM account (*i.e.*, CTEP username and password).
* To enroll patients or request slot reservations: Be on an ETCTN Corresponding or Participating Organization roster with the role of Registrar.
* To approve slot reservations or access cohort management: Be identified to Theradex as the “Client Admin” for the study.
* Have regulatory approval for the conduct of the study at their site.

Prior to accessing OPEN/IWRS, site staff should verify the following:

* All eligibility criteria have been met within the protocol stated timeframes. Site staff should use the registration forms provided on the CTSU web site as a tool to verify eligibility.
* If applicable, all patients have signed an appropriate consent form and HIPAA authorization form.
  + 1. OPEN/IWRS Questions?

Further instructional information on OPEN is provided on the OPEN tab of the CTSU website at <https://www.ctsu.org> or at <https://open.ctsu.org>. For any additional questions contact the CTSU Help Desk at 1-888-823-5923 or [ctsucontact@westat.com](mailto:ctsucontact@westat.com).

Theradex has developed a Slot Reservations and Cohort Management User Guide, which is available on the Theradex website: <http://theradex.com/CTMS/Downloads.aspx>. This link to the Theradex website is also on the CTSU website OPEN tab. For questions about the use of IWRS for slot reservations, contact the Theradex Helpdesk: 609-619-7802 or Theradex main number 609-799-7580; [CTMSSupport@theradex.com](mailto:CTMSSupport@theradex.com).

## General Guidelines

Following registration, patients should begin protocol treatment within *[# of days]* days.\* Issues that would cause treatment delays should be discussed with the Principal Investigator. If a patient does not receive protocol therapy following registration, the patient’s registration on the study may be canceled. The Study Coordinator should be notified of cancellations as soon as possible.

*[\*Note: This can be edited for leukemia protocols where treatment should be started as rapidly as possible.]*

# TREATMENT AND/OR IMAGING PLAN

*Renumber sections as necessary depending on which sections are included for phase 1 or 2, single-agent or combination, or imaging protocols.*

## Agent Administration

Treatment will be administered on an *[inpatient/outpatient]* basis. Reported adverse events and potential risks are described in Section 7. Appropriate dose modifications are described in Section 6. No investigational or commercial agents or therapies other than those described below may be administered with the intent to treat the patient's malignancy.

*For phase 1 dose-escalation protocols: State the starting dose of each agent and describe the dose escalation scheme and treatment regimen.*  ***Use exact doses rather than percentages****. If appropriate, a table may be used to describe the regimen; see examples below for phase 1 single-agent and combination protocols. Please refer to the CTEP Web site (*[*http://ctep.cancer.gov/protocolDevelopment/policies\_nomenclature.htm*](http://ctep.cancer.gov/protocolDevelopment/policies_nomenclature.htm)*) for Guidelines for Treatment Regimen Nomenclature and Expression.*

*Example for phase 1 single-agent protocols:*

|  |  |
| --- | --- |
| **Dose Escalation Schedule** | |
| **Dose Level** | Dose of *[CTEP IND Agent]\** |
| Level 1 |  |
| Level 2 |  |
| Level 3 |  |
| Level 4 |  |
| Level 5 |  |
| *\* Doses are stated as exact dose in units (*e.g.*, mg/m2, mcg/kg, etc.) rather than as a percentage.* | |

*Examples for phase 1 combination protocols:*

|  |  |  |  |
| --- | --- | --- | --- |
| **Dose Escalation Schedule** | | | |
| **Dose Level** | **Dose\*** | | |
| ***[Agent X]***  ***(units)*** | ***[Agent Y]***  ***(units)*** | ***[Agent Z]***  ***(units)*** |
| Level 1 |  |  |  |
| Level 2 |  |  |  |
| Level 3 |  |  |  |
| Level 4 |  |  |  |
| Level 5 |  |  |  |
| *\*Doses are stated as exact dose in units (*e.g.*, mg/m2, mcg/kg, etc.) rather than as a percentage.* | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Regimen Description** | | | | | |
| ***Agent*** | ***Premedications; Precautions*** | ***Dose*** | ***Route*** | ***Schedule*** | ***Cycle Length*** |
| *[Agent X]* | *Premedicate with dexamethasone*  *for 3 days prior to [Agent X]* | *\*\* in 500 cc NS* | *IV over 2 hours* ***before*** *[Agent Y]* | *Days 1-3, week 1* | *28 days*  *(4 weeks)* |
| *[Agent Y]* | *Avoid exposure to cold (food, liquids, air) for 24 hr after each dose.* | *\*\* in 250 cc D5W* | *IV 1 hr after completion of Agent A through separate IV line* | *Days 1-3, week 1* |
| *[Agent Z]* | *Take with food.* | *\*\* tablet* | *PO in the a.m.* | *Daily, weeks 1 and 2* |
| *\*\*Doses as appropriate for assigned dose level.* | | | | | |

*For phase 2 protocols: Please describe the regimen (agent, dose, route, and schedule) and state any special precautions or warnings relevant for investigational study agent administration (*e.g.*, incompatibility of the agent with commonly used intravenous solutions, necessity of administering agent with food, how to round a dose of oral agent to available tablet/capsule strengths, premedications etc.). Please refer to the CTEP Web site (*[*http://ctep.cancer.gov/protocolDevelopment/policies\_nomenclature.htm*](http://ctep.cancer.gov/protocolDevelopment/policies_nomenclature.htm)*) for Guidelines for Treatment Regimen Expression and Nomenclature.*

*NOTE: For orally administered agents, a method for assessing compliance with treatment should be included, i.e., “The patient will be requested to maintain a medication diary of each dose of medication. The medication diary will be returned to clinic staff at the end of each course.”*

* + 1. *CTEP and/or CIP IND Agent(s)*

*Please describe in detail any prophylactic or supportive care regimens required for investigational study agent(s) administration and state any special precautions or relevant warnings (*e.g.*, incompatibility of agent with commonly used intravenous solutions, necessity of administering agent(s) with food, premedications, etc.).*

* + 1. *Other Agent(s)*

*Please describe in detail any prophylactic or supportive care regimens required for administration of each other agent in the treatment and**state any special precautions or relevant warnings (*e.g.*, incompatibility of agent with commonly used intravenous solutions, necessity of administering agent with food, premedications, etc.).*

* + 1. *Other Modality(ies) or Procedures*

*Please provide a detailed description of any other modalities (*e.g.*, surgery, radiotherapy) or procedures (*e.g.*, hematopoietic stem cell transplantation) used in the protocol treatment. If this study involves no other modalities or procedures, this section should be marked “N/A”.*

* + 1. *Investigational Imaging Agent Administration*

*Please describe the imaging agent regimen (agent, dose, route, schedule, timing relative to imaging, special precautions or procedures, required pre-administration lab parameters [*e.g.*, blood glucose]) for imaging agent administration.*

*Please provide the following sections:*

Image Acquisition Details:

Image Analysis Details:

Image Interpretation Details (including whether there will be local and/or central review, *etc*.):

Imaging Related Procedures:

## *For phase 1 protocols only:* Definition of Dose-Limiting Toxicity

*Please provide explicit definitions of the type(s), grade(s), and duration(s) of adverse events that will be considered dose-limiting toxicity(ies), or provide definitions of other endpoints that will be used to determine dose escalations.*

Management and dose modifications associated with the above adverse events are outlined in Section 6.

Dose escalation will proceed within each cohort according to the following scheme. Dose-limiting toxicity (DLT) is defined above. *An accelerated titration design of the investigator's choice may be substituted. An example can be found on the following Web site (*[*http://linus.nci.nih.gov/~brb/Methodologic.htm*](http://linus.nci.nih.gov/~brb/Methodologic.htm)*)*.

|  |  |
| --- | --- |
| **Number of Patients with DLT at a Given Dose Level** | **Escalation Decision Rule** |
| 0 out of 3 | Enter 3 patients at the next dose level. |
| ≥2 | Dose escalation will be stopped. This dose level will be declared the maximally administered dose (highest dose administered). Three (3) additional patients will be entered at the next lowest dose level if only 3 patients were treated previously at that dose. |
| 1 out of 3 | Enter at least 3 more patients at this dose level.   * If 0 of these 3 patients experience DLT, proceed to the next dose level. * If 1 or more of this group suffer DLT, then dose escalation is stopped, and this dose is declared the maximally administered dose. Three (3) additional patients will be entered at the next lowest dose level if only 3 patients were treated previously at that dose. |
| ≤1 out of 6 at highest dose level below the maximally administered dose | This is generally the recommended phase 2 dose. At least 6 patients must be entered at the recommended phase 2 dose. |

## General Concomitant Medication and Supportive Care Guidelines

*Please state guidelines for use of concomitant medications or any additional appropriate supportive care medications or treatments. The potential for interaction with the cytochrome P450 system should be addressed if applicable. Please use or modify the following paragraph as appropriate.*

Because there is a potential for interaction of *[CTEP and/or CIP IND Agent(s)]* with other concomitantly administered drugs through the cytochrome P450 system, the case report form must capture the concurrent use of all other drugs, over-the-counter medications, or alternative therapies. The Principal Investigator should be alerted if the patient is taking any agent known to affect or with the potential to affect selected CYP450 isoenzymes. Appendix C presents guidelines for identifying medications/substances that could potentially interact with the study agent(s).

## Duration of Therapy

In the absence of treatment delays due to adverse event(s), treatment may continue for *[# cycles]* or until one of the following criteria applies:

* Disease progression,
* Intercurrent illness that prevents further administration of treatment,
* Unacceptable adverse event(s),
* Patient decides to withdraw from the study, or
* General or specific changes in the patient's condition render the patient unacceptable for further treatment in the judgment of the investigator.

## Duration of Follow Up

Patients will be followed for *[# of* *weeks]* after removal from study or until death, whichever occurs first. Patients removed from study for unacceptable adverse event(s) will be followed until resolution or stabilization of the adverse event.

## Criteria for Removal from Study

Patients will be removed from study when any of the criteria listed in Section 5.4 applies. The reason for study removal and the date the patient was removed must be documented in the Case Report Form.

# DOSING DELAYS/DOSE MODIFICATIONS

*Treatment plans should explicitly identify when treatment (typically dose) modifications are appropriate. Treatment modifications/dosing delays and the factors predicating treatment modification should be explicit and clear. If dose modifications or treatment delays are anticipated, please provide a dose de-escalation schema.*

*The following format for an orally available agent is provided as an example and should be modified as appropriate for this protocol:*

|  |  |
| --- | --- |
| **Dose Level** | ***[Agent Name]* Dose** |
| -2 | *XX mg, schedule* |
| -1 | *XX mg, schedule* |
| 0 | *XX mg, schedule* |
| +1 | *XX mg, schedule* |
| +2 | *XX mg, schedule* |
| +3 | *XX mg, schedule* |

***Note:*** *All treatment modifications must be expressed as a specific dose or amount rather than as a percentage of the starting or previous dose.*

*For combination studies, dose modifications/treatment delays for [CTEP and/or CIP IND Agent(s)] and [Other Agent(s)] may be presented separately or together, as appropriate. Use of a table format is recommended if applicable.*

*Below are dose modification tables for the following adverse events: nausea, vomiting, diarrhea, neutropenia, and thrombocytopenia. Please use as appropriate. In addition, for your convenience, a blank dose modification table has been provided. Note in the text that if a patient experiences several adverse events and there are conflicting recommendations, the investigator should use the recommended dose adjustment that reduces the dose to the lowest level.*

| **Nausea** | **Management/Next Dose for *[Agent Name]*** | **Management/Next Dose for *[Agent Name]*** |
| --- | --- | --- |
| ≤ Grade 1 | No change in dose | No change in dose |
| Grade 2 | Hold until ≤ Grade 1. Resume at same dose level. | Hold until ≤ Grade 1. Resume at same dose level. |
| Grade 3 | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* |
| Grade 4 | Off protocol therapy | Off protocol therapy |
| \*Patients requiring a delay of >2 weeks should go off protocol therapy.  \*\*Patients requiring > two dose reductions should go off protocol therapy. | | |
| Recommended management: antiemetics. | | |

| **Vomiting** | **Management/Next Dose for *[Agent Name]*** | **Management/Next Dose for *[Agent Name]*** |
| --- | --- | --- |
| ≤ Grade 1 | No change in dose | No change in dose |
| Grade 2 | Hold until ≤ Grade 1. Resume at same dose level. | Hold until ≤ Grade 1. Resume at same dose level. |
| Grade 3 | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* |
| Grade 4 | Off protocol therapy | Off protocol therapy |
| \*Patients requiring a delay of >2 weeks should go off protocol therapy.  \*\*Patients requiring > two dose reductions should go off protocol therapy. | | |
| Recommended management: antiemetics. | | |

| **Diarrhea** | **Management/Next Dose for *[Agent Name]*** | **Management/Next Dose for *[Agent Name]*** |
| --- | --- | --- |
| ≤ Grade 1 | No change in dose | No change in dose |
| Grade 2 | Hold until ≤ Grade 1. Resume at same dose level. | Hold until ≤ Grade 1. Resume at same dose level. |
| Grade 3 | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* |
| Grade 4 | Off protocol therapy | Off protocol therapy |
| \*Patients requiring a delay of >2 weeks should go off protocol therapy.  \*\*Patients requiring > two dose reductions should go off protocol therapy. | | |
| Recommended management: Loperamide antidiarrheal therapy  Dosage schedule: 4 mg at first onset, followed by 2 mg with each loose motion until diarrhea-free for 12 hours (maximum dosage: 16 mg/24 hours)  Adjunct anti-diarrheal therapy is permitted and should be recorded when used. | | |

| **Neutropenia** | **Management/Next Dose for *[Agent Name]*** | **Management/Next Dose for *[Agent Name]*** |
| --- | --- | --- |
| ≤ Grade 1 | No change in dose | No change in dose |
| Grade 2 | Hold until ≤ Grade 1. Resume at same dose level. | Hold until ≤ Grade 1. Resume at same dose level. |
| Grade 3 | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* |
| Grade 4 | Off protocol therapy | Off protocol therapy |
| \*Patients requiring a delay of >2 weeks should go off protocol therapy.  \*\*Patients requiring > two dose reductions should go off protocol therapy. | | |
| *Insert any recommended management guidelines, if appropriate.* | | |

| **Thrombocytopenia** | **Management/Next Dose for *[Agent Name]*** | **Management/Next Dose for *[Agent Name]*** |
| --- | --- | --- |
| ≤ Grade 1 | No change in dose | No change in dose |
| Grade 2 | Hold until ≤ Grade 1. Resume at same dose level. | Hold until ≤ Grade 1. Resume at same dose level. |
| Grade 3 | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* | Hold\* until < Grade 2. Resume at one dose level lower, if indicated.\*\* |
| Grade 4 | Off protocol therapy | Off protocol therapy |
| \*Patients requiring a delay of >2 weeks should go off protocol therapy.  \*\*Patients requiring > two dose reductions should go off protocol therapy. | | |
| *Insert any recommended management guidelines, if appropriate.* | | |

*Example of Dose Modification Table:*

| ***Event*** | **Management/Next Dose for *[Agent Name]*** | **Management/Next Dose for *[Agent Name]*** |
| --- | --- | --- |
| ≤ Grade 1 | *Insert appropriate management guidelines in this column.* | *Insert appropriate management guidelines in this column.* |
| Grade 2 |  |  |
| Grade 3 |  |  |
| Grade 4 |  |  |
| \**Footnote any relevant guidelines regarding how long a delay in therapy is allowed before patients should go off protocol therapy*  \*\**Footnote any relevant guidelines regarding how many dose reductions are allowed before patients should go off protocol therapy.* | | |
| *Insert any recommended management guidelines, if appropriate.* | | |

# ADVERSE EVENTS: LIST AND REPORTING REQUIREMENTS

Adverse event (AE) monitoring and reporting is a routine part of every clinical trial. The following list of AEs (Section 7.1) and the characteristics of an observed AE (Section 7.2) will determine whether the event requires expedited reporting via the CTEP Adverse Event Reporting System (CTEP-AERS) **in addition** to routine reporting.

## Comprehensive Adverse Events and Potential Risks List(s) (CAEPRs)

*The Comprehensive Adverse Event and Potential Risks (CAEPR) list for CTEP-supplied agent(s) will be provided with the LOI approval letter. Sections provided below should be used or deleted as necessary. Adjust the heading levels as appropriate (*e.g.*, if this template is being used for a single-agent protocol, the subsections below can be deleted, and the CAEPR for that agent inserted directly under heading 7.1).*

The Comprehensive Adverse Event and Potential Risks list (CAEPR) provides a single list of reported and/or potential adverse events (AE) associated with an agent using a uniform presentation of events by body system. In addition to the comprehensive list, a subset of AEs, the Specific Protocol Exceptions to Expedited Reporting (SPEER), appears in a separate column and is identified with ***bold*** and ***italicized*** text. The SPEER is a list of events that are protocol-specific exceptions to expedited reporting to NCI (except as noted below). Refer to the 'CTEP, NCI Guidelines: Adverse Event Reporting Requirements' <http://ctep.cancer.gov/protocolDevelopment/adverse_effects.htm> for further clarification.

*The CAEPR may not provide frequency data; if not, refer to the Investigator’s Brochure for this information.*

**NOTE**: The highest grade currently reported is noted in parentheses next to the AE in the SPEER. Report **ONLY** AEs higher than this grade expeditiously. If this CAEPR is part of a combination protocol using multiple investigational agents and has an AE listed on different SPEERs, use the lower of the grades to determine if expedited reporting is required.

* + 1. CAEPRs for CTEP IND Agent(s)
       1. CAEPR for *[CTEP IND Agent #1]*

*The Comprehensive Adverse Events and Potential Risks (CAEPR) list will be provided with the LOI approval letter. Please insert the CAEPR here.*

* + - 1. CAEPR for *[CTEP IND Agent #2]*

*The Comprehensive Adverse Events and Potential Risks (CAEPR) list will be provided with the LOI approval letter. Please insert the CAEPR here.*

* + 1. Adverse Event List(s) for *[Other Investigational Agent(s)]*

*Agent not supplied by CTEP: Please include a comprehensive list of all reported adverse events and any potential risks (such as the toxicities seen with another agent of the same class or risks seen in animals administered this agent) as provided by the manufacturer.*

* + 1. Adverse Event List(s) for Commercial Agent(s)

*For each commercial agent, please provide a list of those adverse events most likely to occur on this study, and refer the reader to the package insert(s) for the comprehensive list of adverse events.*

* + 1. CAEPR for *[CIP IND Agent #1)]*

*The Comprehensive Adverse Events and Potential Risks (CAEPR) list will be provided with the LOI approval letter. Please insert the CAEPR here.*

*For each CIP and/or commercial image agent, please provide a list of those adverse events most likely to occur on this study, and refer the reader to the Investigator’s Brochure and/or package insert(s) for the comprehensive list of adverse events.*

* + 1. Adverse Event List(s) for CIP (*e.g.* Study-Specific) Commercial Imaging Agents

*For each CIP study-specific commercial imaging agent, please provide a list of those adverse events most likely to occur on this study, and refer the reader to the Investigator’s Brochure and/or package insert(s) for the comprehensive list of adverse events.*

## Adverse Event Characteristics

* **CTCAE term (AE description) and grade:** The descriptions and grading scales found in the revised NCI Common Terminology Criteria for Adverse Events (CTCAE) version 4.0 will be utilized for AE reporting. All appropriate treatment areas should have access to a copy of the CTCAE version 4.0. A copy of the CTCAE version 4.0 can be downloaded from the CTEP web site <http://ctep.cancer.gov/protocolDevelopment/electronic_applications/ctc.htm>.
* **For expedited reporting purposes only:**
* AEs for the agent that are ***bold and italicized*** in the CAEPR (*i.e.*, those listed in the SPEER column, Section 7.1.1) should be reported through CTEP-AERS only if the grade is above the grade provided in the SPEER.
* Other AEs for the protocol that do not require expedited reporting are outlined in section 7.3.4.
* **Attribution** of the AE:
  + Definite – The AE *is clearly related* to the study treatment.
  + Probable – The AE *is likely related* to the study treatment.
  + Possible – The AE *may be related* to the study treatment.
  + Unlikely – The AE *is doubtfully related* to the study treatment.
  + Unrelated – The AE *is clearly NOT related* to the study treatment.

## Expedited Adverse Event Reporting

* + 1. Expedited AE reporting for this study must use CTEP-AERS (CTEP Adverse Event Reporting System), accessed via the CTEP Web site (<https://eapps-ctep.nci.nih.gov/ctepaers>). The reporting procedures to be followed are presented in the “NCI Guidelines for Investigators: Adverse Event Reporting Requirements for DCTD (CTEP and CIP) and DCP INDs and IDEs” which can be downloaded from the CTEP Web site (<http://ctep.cancer.gov/protocolDevelopment/electronic_applications/adverse_events.htm>). These requirements are briefly outlined in the tables below (Section 7.3.3).

In the rare occurrence when Internet connectivity is lost, a 24-hour notification is to be made to CTEP by telephone at 301-897-7497. Once Internet connectivity is restored, the 24-hour notification phoned in must be entered electronically into CTEP-AERS by the original submitter at the site.

* + 1. CTEP-AERS is programmed for automatic electronic distribution of reports to the following individuals: Principal Investigator and Adverse Event Coordinator(s) (if applicable) of the Corresponding Organization, the local treating physician, and the Reporter and Submitter. CTEP-AERS provides a copy feature for other e-mail recipients.

The Coordinating Center of the Corresponding Organization is responsible for submitting to the CTSU documentation of AEs that they deem reportable for posting on the CTSU protocol web page and inclusion on the CTSU bi-monthly broadcast.

* + 1. Expedited Reporting Guidelines

Use the NCI protocol number and the protocol-specific patient ID assigned during trial registration on all reports.

**Note: A death on study requires both routine and expedited reporting regardless of causality, unless as noted below. Attribution to treatment or other cause must be provided.**

Death due to progressive disease should be reported as **Grade 5 “Neoplasms benign, malignant and unspecified (incl cysts and polyps) - Other (Progressive Disease)”**under the system organ class (SOC) of the same name. Evidence that the death was a manifestation of underlying disease (*e.g.*, radiological changes suggesting tumor growth or progression: clinical deterioration associated with a disease process) should be submitted.

**Phase 0 Studies: Expedited Reporting Requirements for Adverse Events that Occur on Studies under an IND/IDE within 30 Days of the Last Administration of the Investigational Agent/Intervention1, 2**

|  |  |
| --- | --- |
| **FDA REPORTING REQUIREMENTS FOR SERIOUS ADVERSE EVENTS (21 CFR Part 312)**  **NOTE:** Investigators **MUST** immediately report to the sponsor (NCI) **ANY** Serious Adverse Events, whether or not they are considered related to the investigational agent(s)/intervention (21 CFR 312.64)  An adverse event is considered serious if it results in **ANY** of the following outcomes:   1. Death 2. A life-threatening adverse event 3. An adverse event results in inpatient hospitalization or prolongation of existing hospitalization for ≥ 24 hours 4. A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions 5. A congenital anomaly/birth defect. 6. Important Medical Events (IME) that may not result in death, be life threatening, or require hospitalization may be considered serious when, based upon medical judgment, they may jeopardize the patient or subject and may require medical or surgical intervention to prevent one of the outcomes listed in this definition (FDA, 21 CFR 312.32; ICH E2A and ICH E6). | |
| **ALL SERIOUS** adverse events that meet the above criteria **MUST** be immediately reported to the NCI via electronic submission within the timeframes detailed in the table below. | |
| **Grade 1 and 2 Timeframes** | **Grade 3-5 Timeframes** |
| 10 Calendar Days | 24-Hour 5 Calendar Days |
| **Expedited AE reporting timelines are defined as:**   * “24-Hour; 5 Calendar Days” - The AE must initially be submitted electronically within 24 hours of learning of the AE, followed by a complete expedited report within 5 calendar days of the initial 24-hour report.   + “10 Calendar Days” - A complete expedited report on the AE must be submitted electronically within 10 calendar days of learning of the AE. | |
| 1Serious adverse events that occur **more than** 30 days after the last administration of investigational agent/intervention require reporting as follows:  Expedited 24-hour notification followed by complete report within 5 calendar days for **ALL** Grade 4 and 5 AEs and Grade 3 AEs with at least a possible attribution.  2For studies using PET or SPECT IND agents, the AE reporting period is limited to 10 radioactive half-lives, rounded UP to the nearest whole day, after the agent/intervention was last administered. Footnote “1” above applies after this reporting period.  Effective Date: May 5, 2011 | |

**Phase 1 and Early Phase 2 Studies: Expedited Reporting Requirements for Adverse Events that Occur on Studies under an IND/IDE within 30 Days of the Last Administration of the Investigational Agent/Intervention 1, 2**

|  |  |  |
| --- | --- | --- |
| **FDA REPORTING REQUIREMENTS FOR SERIOUS ADVERSE EVENTS (21 CFR Part 312)**  **NOTE:** Investigators **MUST** immediately report to the sponsor (NCI) **ANY** Serious Adverse Events, whether or not they are considered related to the investigational agent(s)/intervention (21 CFR 312.64)  An adverse event is considered serious if it results in **ANY** of the following outcomes:   1. Death 2. A life-threatening adverse event 3. An adverse event that results in inpatient hospitalization or prolongation of existing hospitalization for ≥ 24 hours 4. A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions 5. A congenital anomaly/birth defect. 6. Important Medical Events (IME) that may not result in death, be life threatening, or require hospitalization may be considered serious when, based upon medical judgment, they may jeopardize the patient or subject and may require medical or surgical intervention to prevent one of the outcomes listed in this definition. (FDA, 21 CFR 312.32; ICH E2A and ICH E6). | | |
| **ALL SERIOUS** adverse events that meet the above criteria MUST be immediately reported to the NCI via electronic submission within the timeframes detailed in the table below. | | |
| **Hospitalization** | **Grade 1 and Grade 2 Timeframes** | **Grade 3-5**  **Timeframes** |
| Resulting in Hospitalization  ≥ 24 hrs | 10 Calendar Days | 24-Hour 5 Calendar Days |
| Not resulting in Hospitalization  ≥ 24 hrs | Not required |
| **NOTE:** Protocol specific exceptions to expedited reporting of serious adverse events are found in the Specific Protocol Exceptions to Expedited Reporting (SPEER) portion of the CAEPR.  **Expedited AE reporting timelines are defined as:**   * “24-Hour; 5 Calendar Days” - The AE must initially be submitted electronically within 24 hours of learning of the AE, followed by a complete expedited report within 5 calendar days of the initial 24-hour report. * “10 Calendar Days” - A complete expedited report on the AE must be submitted electronically within 10 calendar days of learning of the AE. | | |
| 1Serious adverse events that occur more than 30 days after the last administration of investigational agent/intervention and have an attribution of possible, probable, or definite require reporting as follows:  **Expedited 24-hour notification followed by complete report within 5 calendar days for:**   * All Grade 3, 4, and Grade 5 AEs   **Expedited 10 calendar day reports for:**   * Grade 2 AEs resulting in hospitalization or prolongation of hospitalization   2For studies using PET or SPECT IND agents, the AE reporting period is limited to 10 radioactive half-lives, rounded UP to the nearest whole day, after the agent/intervention was last administered. Footnote “1” above applies after this reporting period.  Effective Date: May 5, 2011 | | |

**Late Phase 2 and Phase 3 Studies: Expedited Reporting Requirements for Adverse Events that Occur on Studies under an IND/IDE within 30 Days of the Last Administration of the Investigational Agent/Intervention1, 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **FDA REPORTING REQUIREMENTS FOR SERIOUS ADVERSE EVENTS (21 CFR Part 312)**  **NOTE:** Investigators **MUST** immediately report to the sponsor (NCI) **ANY** Serious Adverse Events, whether or not they are considered related to the investigational agent(s)/intervention (21 CFR 312.64)  An adverse event is considered serious if it results in **ANY** of the following outcomes:   1. Death 2. A life-threatening adverse event 3. An adverse event that results in inpatient hospitalization or prolongation of existing hospitalization for ≥ 24 hours 4. A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions 5. A congenital anomaly/birth defect. 6. Important Medical Events (IME) that may not result in death, be life threatening, or require hospitalization may be considered serious when, based upon medical judgment, they may jeopardize the patient or subject and may require medical or surgical intervention to prevent one of the outcomes listed in this definition. (FDA, 21 CFR 312.32; ICH E2A and ICH E6). | | | | |
| **ALL SERIOUS** adverse events that meet the above criteria **MUST** be immediately reported to the NCI via electronic submission within the timeframes detailed in the table below. | | | | |
| **Hospitalization** | **Grade 1 Timeframes** | **Grade 2 Timeframes** | **Grade 3 Timeframes** | **Grade 4 & 5 Timeframes** |
| Resulting in Hospitalization  ≥ 24 hrs | 10 Calendar Days | | | 24-Hour 5 Calendar Days |
| Not resulting in  Hospitalization  ≥ 24 hrs | Not required | | 10 Calendar Days |
| **NOTE:** Protocol specific exceptions to expedited reporting of serious adverse events are found in the Specific Protocol Exceptions to Expedited Reporting (SPEER) portion of the CAEPR  **Expedited AE reporting timelines are defined as:**   * “24-Hour; 5 Calendar Days” - The AE must initially be submitted electronically within 24 hours of learning of the AE, followed by a complete expedited report within 5 calendar days of the initial 24-hour report. * “10 Calendar Days” - A complete expedited report on the AE must be submitted electronically within 10 calendar days of learning of the AE. | | | | |
| 1Serious adverse events that occur more than 30 days after the last administration of investigational agent/intervention and have an attribution of possible, probable, or definite require reporting as follows:  **Expedited 24-hour notification followed by complete report within 5 calendar days for:**   * All Grade 4, and Grade 5 AEs   **Expedited 10 calendar day reports for:**   * Grade 2 adverse events resulting in hospitalization or prolongation of hospitalization * Grade 3 adverse events   2For studies using PET or SPECT IND agents, the AE reporting period is limited to 10 radioactive half-lives, rounded UP to the nearest whole day, after the agent/intervention was last administered. Footnote “1” above applies after this reporting period.  Effective Date: May 5, 2011 | | | | |

**FOR USE IN CIP STUDIES INVOLVING COMMERCIAL (NON-IND/IDE) AGENTS ONLY**

**CIP Commercial Agent Studies: Expedited Reporting Requirements for Adverse Events that Occur in a CIP Non-IND/IDE trial within 30 Days of the Last Administration of a Commercial Imaging Agent 1, 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **FDA REPORTING REQUIREMENTS FOR SERIOUS ADVERSE EVENTS (21 CFR Part 312)**  **NOTE:** Investigators **MUST** immediately report to the sponsor (NCI) **ANY** Serious Adverse Events, whether or not they are considered related to the investigational agent(s)/intervention (21 CFR 312.64)  An adverse event is considered serious if it results in **ANY** of the following outcomes:   1. Death 2. A life-threatening adverse event 3. An adverse event that results in inpatient hospitalization or prolongation of existing hospitalization for ≥ 24 hours 4. A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions 5. A congenital anomaly/birth defect. 6. Important Medical Events (IME) that may not result in death, be life threatening, or require hospitalization may be considered serious when, based upon medical judgment, they may jeopardize the patient or subject and may require medical or surgical intervention to prevent one of the outcomes listed in this definition. (FDA, 21 CFR 312.32; ICH E2A and ICH E6). | | | | |
| **ALL SERIOUS** adverse events that meet the above criteria **MUST** be immediately reported to the NCI via electronic submission within the timeframes detailed in the table below. | | | | |
| **Hospitalization** | **Grade 1 Timeframes** | **Grade 2 Timeframes** | **Grade 3 Timeframes** | **Grade 4 & 5 Timeframes** |
| Resulting in Hospitalization  ≥ 24 hrs | 10 Calendar Days | | | 24-Hour 5 Calendar Days |
| Not resulting in  Hospitalization  ≥ 24 hrs | Not required | | 10 Calendar Days |
| **NOTE:** Protocol specific exceptions to expedited reporting of serious adverse events are found in the Specific Protocol Exceptions to Expedited Reporting (SPEER) portion of the CAEPR  **Expedited AE reporting timelines are defined as:**   * “24-Hour; 5 Calendar Days” - The AE must initially be submitted electronically within 24 hours of learning of the AE, followed by a complete expedited report within 5 calendar days of the initial 24-hour report. * “10 Calendar Days” - A complete expedited report on the AE must be submitted electronically within 10 calendar days of learning of the AE. | | | | |
| 1Serious adverse events that occur more than 30 days after the last administration of investigational agent/intervention and have an attribution of possible, probable, or definite require reporting as follows:  **Expedited 24-hour notification followed by complete report within 5 calendar days for:**   * All Grade 4, and Grade 5 AEs   **Expedited 10 calendar day reports for**:   * Grade 2 adverse events resulting in hospitalization or prolongation of hospitalization Grade 3 adverse events   2 For studies using PET or SPECT agents, the AE reporting period is limited to 10 radioactive half-lives, rounded UP to the nearest whole day, after the agent/intervention was last administered. Footnote “1” above applies after this reporting period.  Effective Date: May 5, 2011 | | | | |

* + 1. Additional Protocol-Specific Expedited Adverse Event Reporting Exclusions

For this protocol only, the AEs/grades listed below do not require expedited reporting via CTEP-AERS. However, they still must be reported through the routine reporting mechanism (Section 7.4):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CTCAE SOC** | **Adverse Event** | **Grade** | **Hospitalization/ Prolongation of Hospitalization** | **Attribution** | **Comments** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

*For protocols including advanced imaging, please insert information as to the window of time and all other parameters that will determine eligibility of events for AE reporting. For example, for studies using PET and SPECT, or MR, the AE reporting period is limited to:*

* [PET & SPECT = 10 radioactive half lives rounded UP to the nearest whole day]
* [MR = 30 days]

## Routine Adverse Event Reporting

All Adverse Events **must** be reported in routine study data submissions. **AEs reported expeditiously through CTEP-AERS must also be reported in routine study data submissions.**

Adverse event data collection and reporting, which are required as part of every clinical trial, are done to ensure the safety of patients enrolled in the studies as well as those who will enroll in future studies using similar agents. AEs are reported in a routine manner at scheduled times during the trial using Medidata Rave. For this trial the ***[form name]*** is used for routine AE reporting in Rave.

## Secondary Malignancy

A *secondary malignancy* is a cancer caused by treatment for a previous malignancy (*e.g.*, treatment with investigational agent/intervention, radiation or chemotherapy). A secondary malignancy is not considered a metastasis of the initial neoplasm.

CTEP requires all secondary malignancies that occur following treatment with an agent under an NCI IND/IDE be reported expeditiously via CTEP-AERS. Three options are available to describe the event:

* Leukemia secondary to oncology chemotherapy (*e.g.*, acute myelocytic leukemia [AML])
* Myelodysplastic syndrome (MDS)
* Treatment-related secondary malignancy

Any malignancy possibly related to cancer treatment (including AML/MDS) should also be reported via the routine reporting mechanisms outlined in each protocol.

*Indicate form for reporting in Rave, timeframes, and if loading of the pathology report is required.*

## Second Malignancy

A second malignancy is one unrelated to the treatment of a prior malignancy (and is **NOT** a metastasis from the initial malignancy). Second malignancies require **ONLY** routine AE reporting unless otherwise specified.

# PHARMACEUTICAL and/or IMAGING AGENT INFORMATION

A list of the adverse events and potential risks associated with the investigational or commercial agents administered in this study can be found in Section 7.1.

*Sections provided below should be used or deleted as necessary. Adjust the heading levels as appropriate (*e.g.*, if only one agent is included in the protocol template, the subsections below can be deleted, and the pharmaceutical information for that agent inserted directly under heading 8.1). Include a subsection regarding* ***Availability, Ordering,*** *and* ***Accountability*** *for each agent included in the protocol.*

## CTEP and/or CIP IND Agent(s)

***Confidential*** *pharmaceutical information for investigational study agents supplied by CTEP and/or CIP will be provided as attachments to the approved Letter of Intent (LOI) response and should be inserted below as indicated.*

* + 1. *CTEP and/or CIP IND Agent #1 (NSC #)*

*Insert pharmaceutical and/or imaging information for CTEP and/or CIP IND Agent #1 here.*

*For CIP agents, include reference to the current Investigator’s Brochure, and include appropriate Dosimetry, Quality Assurance, Quality Control, and Storage information from the Investigator’s Brochure and/or supplier.*

**Availability**

*[CTEP and/or CIP IND Agent #1]* is an investigational agent supplied to investigators by the Division of Cancer Treatment and Diagnosis (DCTD), NCI.

*If the study agent is provided by the NCI under a Collaborative Agreement with the agent manufacturer, the text below must be included in the protocol. Information on the study agent’s Collaborative Agreement status will be provided in the approved LOI response letter.*

*[CTEP and/or CIP IND Agent #1]* is provided to the NCI under a Collaborative Agreement between the Pharmaceutical Collaborator and the DCTD, NCI (see Section 12.3).

* + 1. *CTEP and/or CIP IND Agent #2 (NSC #)*

*Insert pharmaceutical information for CTEP and/or CIP IND Agent #2 here. If only a single CTEP and/or CIP IND Agent will be used in the trial, this section and the text below should be deleted.*

**Availability**

*[CTEP and/or CIP IND Agent #2]* is an investigational agent supplied to investigators by the Division of Cancer Treatment and Diagnosis (DCTD), NCI.

*If the study agent is provided by the NCI under a Collaborative Agreement with the agent manufacturer, the text below must be included in the protocol. Information on the study agent’s Collaborative Agreement status will be provided in the approved LOI response letter.*

*[CTEP and/or CIP IND Agent #2]* is provided to the NCI under a Collaborative Agreement between the Pharmaceutical Collaborator and the DCTD, NCI (see Section 12.3).

* + 1. Agent Ordering and Agent Accountability
       1. NCI-supplied agents may be requested by the Principal Investigator (or their authorized designee) at each participating institution. Pharmaceutical Management Branch (PMB) policy requires that agent be shipped directly to the institution where the patient is to be treated. PMB does not permit the transfer of agents between institutions (unless prior approval from PMB is obtained). The CTEP-assigned protocol number must be used for ordering all CTEP-supplied investigational agents. The responsible investigator at each participating institution must be registered with CTEP, DCTD through an annual submission of FDA Form 1572 (Statement of Investigator), Curriculum Vitae, Supplemental Investigator Data Form (IDF), and Financial Disclosure Form (FDF). If there are several participating investigators at one institution, CTEP-supplied investigational agents for the study should be ordered under the name of one lead investigator at that institution.

Active CTEP-registered investigators and investigator-designated shipping designees and ordering designees can submit agent requests through the PMB Online Agent Order Processing (OAOP) application (<https://eapps-ctep.nci.nih.gov/OAOP/pages/login.jspx>). Access to OAOP requires the establishment of a CTEP Identity and Access Management (IAM) account (<https://eapps-ctep.nci.nih.gov/iam/>) and the maintenance of an “active” account status and a “current” password. For questions about drug orders, transfers, returns, or accountability, call (240) 276-6575 Monday through Friday between 8:30 am and 4:30 pm (ET) or email [PMBAfterHours@mail.nih.gov](mailto:PMBAfterHours@mail.nih.gov) anytime.

* + - 1. Agent Inventory Records – The investigator, or a responsible party designated by the investigator, must maintain a careful record of the inventory and disposition of all agents received from DCTD using the NCI Drug Accountability Record Form (DARF). (See the NCI Investigator’s Handbook for Procedures for Drug Accountability and Storage.)

*For CIP IND Agents, insert the following text (and delete text above):*

The CIP regulatory staff will inform the commercial radiopharmac(y/ies) that your NCI protocol is authorized to use the IND agent under NCI’s IND. The IND agent can then be purchased from a NCI CIP AUTHORIZED commercial vendor under the NCI IND. The vendor must be specifically authorized within the NCI IND. The investigator or appropriate investigator-designee will order subject doses of the IND agent for this specific trial. The investigational radiopharmaceutical will be shipped to the site by the day the participant is to be injected, taking into account varying radioactive half-lives for different radioactive imaging agents. 

## *Other Investigational Agent(s)*

*If there are no other investigational agent(s) in this study, this section and the instructions below should be deleted.*

*A separate pharmaceutical section is needed for each investigational agent containing at least the following information, available from the appropriate Investigator’s Brochure:*

***Product description****: Include the available dosage forms, ingredients, and packaging, as appropriate. Also state the agent's supplier.*

***Solution preparation*** *(how the dose is to be prepared): Include reconstitution directions and directions for further dilution, if appropriate.*

***Storage requirements:*** *Include the requirements for the original dosage form, reconstituted solution, and final diluted product, as applicable.*

***Stability:*** *Include the stability of the original dosage form, reconstituted solution, and final diluted product, as applicable.*

***Route of administration:*** *Include a description of the method to be used and the rate of administration, if applicable. For example, continuous intravenous infusion over 24 hours, short intravenous infusion over 30-60 minutes, intravenous bolus, etc. Describe any precautions required for safe administration.*

***Agent Ordering:*** *Include instructions for agent procurement processes.*

*For imaging agents, include reference to the current Investigator’s Brochure, and include appropriate Dosimetry, Quality Assurance, Quality Control, and Storage information from the Investigator’s Brochure and/or supplier.*

## *Commercial Agent(s)*

*If there are no commercial agent(s) in this study, this section and the instructions below should be deleted.*

*A separate pharmaceutical section is needed for each agent containing at least the following information, available in the manufacturer's current package insert:*

***Product description****: Include any dosage form(s), ingredients, and packaging applicable to the protocol. Also, state the agent's supplier or state that it is commercially available.*

***Solution preparation*** *(how the dose is to be prepared): Investigators may refer the reader to the package insert for 'standard' preparation instructions. If the agent is to be prepared in a 'non-standard' or protocol-specific fashion, the reconstitution directions and instructions for further dilution must be included. Appropriate storage and stability information should be included to support the method of preparation.*

***Route of administration:*** *Include a description of the method to be used and the rate of administration, if applicable. For example, continuous intravenous infusion over 24 hours, short intravenous infusion over 30-60 minutes, intravenous bolus, etc. Describe any precautions required for safe administration.*

***Agent Ordering:*** *Include instructions for agent procurement processes. If agent is being purchased, state that the agent is commercially available. Or, if commercial agent is being provided for the study, the supplier should be identified.*

*For imaging agents, include reference to the current Investigator’s Brochure, and include appropriate Dosimetry, Quality Assurance, Quality Control, and Storage information from the Investigator’s Brochure and/or supplier.*

# BIOMARKER, CORRELATIVE, AND SPECIAL STUDIES

*Please briefly describe all planned correlative studies in the appropriate subsections below. Also please see the “Guidelines for Correlative Studies in Clinical Trials” provided with the LOI response and available on the CTEP Web site (*[*http://ctep.cancer.gov/protocolDevelopment/ancillary\_correlatives.htm*](http://ctep.cancer.gov/protocolDevelopment/ancillary_correlatives.htm)*).*

*The description for* ***all proposed biomarker studies*** *should include specific information, as outlined below (where applicable).*

1. *Provide a hypothesis and rationale for biomarker utility and a description of the impact on therapeutic agent development based on the following considerations:*
   1. *Biological and/or mechanistic rationale with data to support relationship between biomarker and agent effects*
   2. *Intended use within the proposed study*
   3. *Preclinical in vitro and in vivo, and clinical results, if applicable*
2. *Describe the assay method’s validity and appropriateness for the study*
3. *Describe the investigator’s experience and competence with the proposed assays*
4. *Provide the data supporting the degree of biomarker “fit for purpose” and clinical qualification*
5. *Justify the number of patients and specimens:*
   1. *To demonstrate feasibility*
   2. *To demonstrate that studies are likely to produce interpretable and meaningful results*
6. *Give thoughtful consideration to the risk to the patient of obtaining samples, specimens, or data for biomarker studies in the context of data on biomarker validity and degree of clinical qualification*

***Explicit instructions for handling, preserving, and shipping specimens should be provided****. If samples will be shipped to a central laboratory for processing and analysis, responsible parties and contact information should be provided in addition to instructions for handling, preserving, and shipping the specimens.*

*A plan for statistical analysis of the results of the correlative study(ies) should be provided in Section 13.4, Analysis of Secondary Endpoints.*

*A correlative study title using meaningful descriptive text should be provided for each planned correlative study using the Protocol Submission Worksheet found on the CTEP Web site (*[*http://ctep.cancer.gov/protocolDevelopment/default.htm*](http://ctep.cancer.gov/protocolDevelopment/default.htm)*). These titles will facilitate documentation of contributions to basic science in the context of the clinical trial.*

*For all biomarker studies, please specify whether the study is “integral,” “integrated,” or “ancillary/exploratory,” as defined by Dancey* et al. *(“Guidelines for the Development and Incorporation of Biomarker Studies in Early Clinical Trials of Novel Agents*.” Clin Cancer Res. *2010; 16:1745-55.). For example, an “integral” bioassay is one that is necessary for the trial to proceed,* i.e., *the outcome determines patient disposition. Note especially that if integral markers are to be used to make individual patient decisions, then CLIA regulations will apply (*[*http://wwwn.cdc.gov/CLIA/Default.aspx*](http://wwwn.cdc.gov/CLIA/Default.aspx)*).*

*If development of diagnostic assays to identify patients who might benefit from a molecularly targeted therapy is planned, validation in a central reference laboratory, tissue banking, and standardization of procedures is of high importance. Information on endpoint validation including additional background (as needed), description of the assay(s) used, materials and methods, and assay validation should be provided in an appendix (see also the instructions under Section 9.1, Integral Laboratory or Imaging Studies).*

*A format for presentation of the required information is shown below.*

*If this trial does not include correlative or special studies, this section should be marked “N/A” and all instructions as well as the text below deleted.*

## Integral Laboratory or Imaging Studies

*If the protocol includes any* ***integral*** *biomarker studies using* in situ *hybridization (ISH), immunohistochemistry (IHC), and/or DNA-based mutation assays, you may fill out the appropriate template (found at* [*http://www.cancerdiagnosis.nci.nih.gov/diagnostics/templates.htm*](http://www.cancerdiagnosis.nci.nih.gov/diagnostics/templates.htm)*) and attach to this protocol submission as separate Appendices (see Appendix D).*

*If the laboratory or laboratories performing the studies has an alternatively-formatted document that supplies the same level of information regarding validation, materials and methods,* etc*., it may be used instead of the templates.*

* + 1. *Title – Integral Laboratory Correlative Study #1*
       1. Collection of Specimen(s)
       2. Handling of Specimens(s)
       3. Shipping of Specimen(s)
       4. Site(s) Performing Correlative Study
    2. *Title – Integral Laboratory Correlative Study #2*
       1. Collection of Specimen(s)
       2. Handling of Specimens(s)
       3. Shipping of Specimen(s)
       4. Site(s) Performing Correlative Study

## Investigational Device Information

*If an investigational device requiring an IDE is to be used in this trial, please provide the IDE #, IDE title, and the IDE sponsor. This section should be deleted if no investigational devices requiring an IDE are used.*

## Integrated Correlative Studies

* + 1. *Title – Integrated Laboratory Correlative Study #1*
       1. Collection of Specimen(s)
       2. Handling of Specimens(s)
       3. Shipping of Specimen(s)
       4. Site(s) Performing Correlative Study
    2. *Title – Integrated Laboratory Correlative Study #2*
       1. Collection of Specimen(s)
       2. Handling of Specimens(s)
       3. Shipping of Specimen(s)
       4. Site(s) Performing Correlative Study

## Exploratory/Ancillary Correlative Studies

* + 1. *Title – Exploratory/Ancillary Laboratory Correlative Study #1*
       1. Collection of Specimen(s)
       2. Handling of Specimens(s)
       3. Shipping of Specimen(s)
       4. Site(s) Performing Correlative Study
    2. *Title – Exploratory/Ancillary Laboratory Correlative Study #2*
       1. Collection of Specimen(s)
       2. Handling of Specimens(s)
       3. Shipping of Specimen(s)
       4. Site(s) Performing Correlative Study

## Special Studies

* + 1. *Title – Special Correlative Study #1*
       1. Outcome Measure
       2. Assessment

9.3.1.2.1 Method of Assessment

9.3.1.2.2 Timing of Assessment

* + - 1. Data Recording

9.3.1.3.1 Method of Recording

9.3.1.3.2 Timing of Recording

# STUDY CALENDAR

***Schedules shown in the Study Calendar below are provided as an example and should be modified as appropriate.***

Baseline evaluations are to be conducted within 1 week prior to start of protocol therapy. Scans and x-rays must be done <4 weeks prior to the start of therapy. In the event that the patient’s condition is deteriorating, laboratory evaluations should be repeated within 48 hours prior to initiation of the next cycle of therapy.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Pre-  Study | Wk  1 | Wk  2 | Wk  3 | Wk  4 | Wk  5 | Wk  6 | Wk  7 | Wk  8 | Wk  9 | Wk  10 | Wk  11 | Wk  12 | Off Studyc |
| *[CTEP and/or CIP IND Agent]* |  | A |  |  | A |  |  | A |  |  | A |  |  |  |
| *[Other Agent(s)]* |  | B | B |  | B | B |  | B | B |  | B | B |  |  |
| Informed consent | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Demographics | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Medical history | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Concurrent meds | X | X---------------------------------------------------------------------------------------------X | | | | | | | | | | | |  |
| Physical exam | X | X |  |  | X |  |  | X |  |  | X |  |  | X |
| Vital signs | X | X |  |  | X |  |  | X |  |  | X |  |  | X |
| Height | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Weight | X | X |  | X |  | X |  | X |  | X |  | X |  | X |
| Performance status | X | X |  | X |  | X |  | X |  | X |  | X |  | X |
| CBC w/diff, plts | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Serum chemistrya | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| EKG (as indicated) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adverse event evaluation |  | X---------------------------------------------------------------------------------------------X | | | | | | | | | | | | X |
| Tumor measurements | X | Tumor measurements are repeated every  *[# weeks]*  weeks. Documentation (radiologic) must be provided for patients removed from study for progressive disease. | | | | | | | | | | | | X |
| Radiologic evaluation | X | Radiologic measurements should be performed every  *[# weeks]*  weeks. | | | | | | | | | | | | X |
| B-HCG | Xb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Advanced imaging events,  as appropriate* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Other tests, as appropriate* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Other correlative studies* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A: *[CTEP and/or CIP IND Agent]*: Dose as assigned; *administration schedule*  B: *[Other Agent(s*)*]*: Dose as assigned*; administration schedule*  a: Albumin, alkaline phosphatase, total bilirubin, bicarbonate, BUN, calcium, chloride, creatinine, glucose, LDH, phosphorus, potassium, total protein, SGOT [AST], SGPT [ALT], sodium.  b: Serum pregnancy test (women of childbearing potential).  c: Off-study evaluation. | | | | | | | | | | | | | | |

# MEASUREMENT OF EFFECT

*Please provide response criteria. If the criteria for solid tumors below are not applicable, the investigator(s) should provide agent- or disease-appropriate criteria (*e.g.*, for specific hematologic malignancies, supportive care agents, etc.) with references, and all solid tumor criteria should be deleted.*

*For phase 1 protocols only:*  Although the clinical benefit of [this/these] drug(s) has not yet been established, the intent of offering this treatment is to provide a possible therapeutic benefit, and thus the patient will be carefully monitored for tumor response and symptom relief in addition to safety and tolerability. Patients with measurable disease will be assessed by standard criteria. For the purposes of this study, patients should be re-evaluated every *[# of weeks]* weeks. In addition to a baseline scan, confirmatory scans will also be obtained *[# of weeks]* weeks following initial documentation of an objective response.

## Antitumor Effect – Solid Tumors

For the purposes of this study, patients should be re-evaluated for response every *[# of weeks]* weeks. In addition to a baseline scan, confirmatory scans should also be obtained *[# of weeks]* (not less than 4) weeks following initial documentation of objective response.

Response and progression will be evaluated in this study using the new international criteria proposed by the revised Response Evaluation Criteria in Solid Tumors (RECIST) guideline (version 1.1) [*Eur J Ca* 45:228-247, 2009]. Changes in the largest diameter (unidimensional measurement) of the tumor lesions and the shortest diameter in the case of malignant lymph nodes are used in the RECIST criteria.

* + 1. Definitions

Evaluable for toxicity. All patients will be evaluable for toxicity from the time of their first treatment with *[CTEP and/or CIP IND Agent(s)]*.

Evaluable for objective response. Only those patients who have measurable disease present at baseline, have received at least one cycle of therapy, and have had their disease re-evaluated will be considered evaluable for response. These patients will have their response classified according to the definitions stated below. (Note: Patients who exhibit objective disease progression prior to the end of cycle 1 will also be considered evaluable.)

Evaluable Non-Target Disease Response. Patients who have lesions present at baseline that are evaluable but do not meet the definitions of measurable disease, have received at least one cycle of therapy, and have had their disease re-evaluated will be considered evaluable for non-target disease. The response assessment is based on the presence, absence, or unequivocal progression of the lesions.

* + 1. Disease Parameters

Measurable disease. Measurable lesions are defined as those that can be accurately measured in at least one dimension (longest diameter to be recorded) as ≥20 mm (≥2 cm) by chest x-ray or as ≥10 mm (≥1 cm) with CT scan, MRI, or calipers by clinical exam. All tumor measurements must be recorded in millimeters (or decimal fractions of centimeters).

Note: Tumor lesions that are situated in a previously irradiated area might or might not be considered measurable. *If the investigator thinks it appropriate to include them, the conditions under which such lesions should be considered must be defined in the protocol*.

Malignant lymph nodes. To be considered pathologically enlarged and measurable, a lymph node must be ≥15 mm (≥1.5 cm) in short axis when assessed by CT scan (CT scan slice thickness recommended to be no greater than 5 mm [0.5 cm]). At baseline and in follow-up, only the short axis will be measured and followed.

Non-measurable disease. All other lesions (or sites of disease), including small lesions (longest diameter <10 mm [<1 cm] or pathological lymph nodes with ≥10 to <15 mm [≥1 to <1.5 cm] short axis), are considered non-measurable disease. Bone lesions, leptomeningeal disease, ascites, pleural/pericardial effusions, lymphangitis cutis/pulmonitis, inflammatory breast disease, and abdominal masses (not followed by CT or MRI), are considered as non-measurable.

Note: Cystic lesions that meet the criteria for radiographically defined simple cysts should not be considered as malignant lesions (neither measurable nor non-measurable) since they are, by definition, simple cysts.

‘Cystic lesions’ thought to represent cystic metastases can be considered as measurable lesions, if they meet the definition of measurability described above. However, if non-cystic lesions are present in the same patient, these are preferred for selection as target lesions.

Target lesions. All measurable lesions up to a maximum of 2 lesions per organ and 5 lesions in total, representative of all involved organs, should be identified as **target lesions** and recorded and measured at baseline. Target lesions should be selected on the basis of their size (lesions with the longest diameter), be representative of all involved organs, but in addition should be those that lend themselves to reproducible repeated measurements. It may be the case that, on occasion, the largest lesion does not lend itself to reproducible measurement in which circumstance the next largest lesion which can be measured reproducibly should be selected. A sum of the diameters (longest for non-nodal lesions, short axis for nodal lesions) for all target lesions will be calculated and reported as the baseline sum diameters. If lymph nodes are to be included in the sum, then only the short axis is added into the sum. The baseline sum diameters will be used as reference to further characterize any objective tumor regression in the measurable dimension of the disease.

Non-target lesions. All other lesions (or sites of disease) including any measurable lesions over and above the 5 target lesions should be identified as **non-target lesions** and should also be recorded at baseline. Measurements of these lesions are not required, but the presence, absence, or in rare cases unequivocal progression of each should be noted throughout follow-up.

* + 1. Methods for Evaluation of Measurable Disease

All measurements should be taken and recorded in metric notation using a ruler or calipers. All baseline evaluations should be performed as closely as possible to the beginning of treatment and never more than 4 weeks before the beginning of the treatment.

The same method of assessment and the same technique should be used to characterize each identified and reported lesion at baseline and during follow-up. Imaging-based evaluation is preferred to evaluation by clinical examination unless the lesion(s) being followed cannot be imaged but are assessable by clinical exam.

Clinical lesionsClinical lesions will only be considered measurable when they are superficial (*e.g.*, skin nodules and palpable lymph nodes) and ≥10 mm (≥1 cm) diameter as assessed using calipers (*e.g.*, skin nodules). In the case of skin lesions, documentation by color photography, including a ruler to estimate the size of the lesion, is recommended.

Chest x-rayLesions on chest x-ray are acceptable as measurable lesions when they are clearly defined and surrounded by aerated lung. However, CT is preferable.

Conventional CT and MRI This guideline has defined measurability of lesions on CT scan based on the assumption that CT slice thickness is 5 mm (0.5 cm) or less. If CT scans have slice thickness greater than 5 mm (0.5 cm), the minimum size for a measurable lesion should be twice the slice thickness. MRI is also acceptable in certain situations (*e.g.* for body scans).

Use of MRI remains a complex issue. MRI has excellent contrast, spatial, and temporal resolution; however, there are many image acquisition variables involved in MRI, which greatly impact image quality, lesion conspicuity, and measurement. Furthermore, the availability of MRI is variable globally. As with CT, if an MRI is performed, the technical specifications of the scanning sequences used should be optimized for the evaluation of the type and site of disease. Furthermore, as with CT, the modality used at follow-up should be the same as was used at baseline and the lesions should be measured/assessed on the same pulse sequence. It is beyond the scope of the RECIST guidelines to prescribe specific MRI pulse sequence parameters for all scanners, body parts, and diseases. Ideally, the same type of scanner should be used and the image acquisition protocol should be followed as closely as possible to prior scans. Body scans should be performed with breath-hold scanning techniques, if possible.

PET-CT At present, the low dose or attenuation correction CT portion of a combined PET-CT is not always of optimal diagnostic CT quality for use with RECIST measurements. However, if the site can document that the CT performed as part of a PET-CT is of identical diagnostic quality to a diagnostic CT (with IV and oral contrast), then the CT portion of the PET-CT can be used for RECIST measurements and can be used interchangeably with conventional CT in accurately measuring cancer lesions over time. Note, however, that the PET portion of the CT introduces additional data which may bias an investigator if it is not routinely or serially performed.

Ultrasound Ultrasound is not useful in assessment of lesion size and should not be used as a method of measurement. Ultrasound examinations cannot be reproduced in their entirety for independent review at a later date and, because they are operator dependent, it cannot be guaranteed that the same technique and measurements will be taken from one assessment to the next. If new lesions are identified by ultrasound in the course of the study, confirmation by CT or MRI is advised. If there is concern about radiation exposure at CT, MRI may be used instead of CT in selected instances.

Endoscopy, Laparoscopy The utilization of these techniques for objective tumor evaluation is not advised. However, such techniques may be useful to confirm complete pathological response when biopsies are obtained or to determine relapse in trials where recurrence following complete response (CR) or surgical resection is an endpoint.

Tumor markers Tumor markers alone cannot be used to assess response. If markers are initially above the upper normal limit, they must normalize for a patient to be considered in complete clinical response. Specific guidelines for both CA-125 response (in recurrent ovarian cancer) and PSA response (in recurrent prostate cancer) have been published [*JNCI* 96:487-488, 2004; *J Clin Oncol* 17, 3461-3467, 1999; *J Clin Oncol* 26:1148-1159, 2008]. In addition, the Gynecologic Cancer Intergroup has developed CA-125 progression criteria which are to be integrated with objective tumor assessment for use in first-line trials in ovarian cancer [*JNCI* 92:1534-1535, 2000].

Cytology, Histology These techniques can be used to differentiate between partial responses (PR) and complete responses (CR) in rare cases (*e.g.*, residual lesions in tumor types, such as germ cell tumors, where known residual benign tumors can remain).

The cytological confirmation of the neoplastic origin of any effusion that appears or worsens during treatment when the measurable tumor has met criteria for response or stable disease is mandatory to differentiate between response or stable disease (an effusion may be a side effect of the treatment) and progressive disease.

FDG-PET While FDG-PET response assessments need additional study, it is sometimes reasonable to incorporate the use of FDG-PET scanning to complement CT scanning in assessment of progression (particularly possible 'new' disease). New lesions on the basis of FDG-PET imaging can be identified according to the following algorithm:

1. Negative FDG-PET at baseline, with a positive FDG-PET at follow-up is a sign of PD based on a new lesion.
2. No FDG-PET at baseline and a positive FDG-PET at follow-up: If the positive FDG-PET at follow-up corresponds to a new site of disease confirmed by CT, this is PD. If the positive FDG-PET at follow-up is not confirmed as a new site of disease on CT, additional follow-up CT scans are needed to determine if there is truly progression occurring at that site (if so, the date of PD will be the date of the initial abnormal FDG-PET scan). If the positive FDG-PET at follow-up corresponds to a pre-existing site of disease on CT that is not progressing on the basis of the anatomic images, this is not PD.
3. FDG-PET may be used to upgrade a response to a CR in a manner similar to a biopsy in cases where a residual radiographic abnormality is thought to represent fibrosis or scarring. The use of FDG-PET in this circumstance should be prospectively described in the protocol and supported by disease-specific medical literature for the indication. However, it must be acknowledged that both approaches may lead to false positive CR due to limitations of FDG-PET and biopsy resolution/sensitivity.

Note: A ‘positive’ FDG-PET scan lesion means one which is FDG avid with an uptake greater than twice that of the surrounding tissue on the attenuation corrected image.

* + 1. Response Criteria
       1. Evaluation of Target Lesions

Complete Response (CR): Disappearance of all target lesions. Any pathological lymph nodes (whether target or non-target) must have reduction in short axis to <10 mm (<1 cm).

Partial Response (PR): At least a 30% decrease in the sum of the diameters of target lesions, taking as reference the baseline sum diameters.

Progressive Disease (PD): At least a 20% increase in the sum of the diameters of target lesions, taking as reference the smallest sum on study (this includes the baseline sum if that is the smallest on study). In addition to the relative increase of 20%, the sum must also demonstrate an absolute increase of at least 5 mm (0.5 cm). (Note: the appearance of one or more new lesions is also considered progressions).

Stable Disease (SD): Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for PD, taking as reference the smallest sum diameters while on study.

* + - 1. Evaluation of Non-Target Lesions

Complete Response (CR): Disappearance of all non-target lesions and normalization of tumor marker level. All lymph nodes must be non-pathological in size (<10 mm [<1 cm] short axis).

Note: If tumor markers are initially above the upper normal limit, they must normalize for a patient to be considered in complete clinical response.

Non-CR/Non-PD: Persistence of one or more non-target lesion(s) and/or maintenance of tumor marker level above the normal limits.

Progressive Disease (PD): Appearance of one or more new lesions and/or *unequivocal progression* of existing non-target lesions. *Unequivocal progression* should not normally trump target lesion status. It must be representative of overall disease status change, not a single lesion increase.

Although a clear progression of “non-target” lesions only is exceptional, the opinion of the treating physician should prevail in such circumstances, and the progression status should be confirmed at a later time by the review panel (or Principal Investigator).

* + - 1. Evaluation of Best Overall Response

The best overall response is the best response recorded from the start of the treatment until disease progression/recurrence (taking as reference for progressive disease the smallest measurements recorded since the treatment started). The patient's best response assignment will depend on the achievement of both measurement and confirmation criteria.

**For Patients with Measurable Disease (*i.e.*, Target Disease)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target Lesions** | **Non-Target Lesions** | **New Lesions** | **Overall Response** | **Best Overall Response when Confirmation is Required\*** |
| CR | CR | No | CR | >4 wks. Confirmation\*\* |
| CR | Non-CR/Non-PD | No | PR | >4 wks. Confirmation\*\* |
| CR | Not evaluated | No | PR |
| PR | Non-CR/Non-PD/not evaluated | No | PR |
| SD | Non-CR/Non-PD/not evaluated | No | SD | Documented at least once >4 wks. from baseline\*\* |
| PD | Any | Yes or No | PD | no prior SD, PR or CR |
| Any | PD\*\*\* | Yes or No | PD |
| Any | Any | Yes | PD |
| * See RECIST 1.1 manuscript for further details on what is evidence of a new lesion.   \*\* Only for non-randomized trials with response as primary endpoint.  \*\*\* In exceptional circumstances, unequivocal progression in non-target lesions may beaccepted as disease progression.  Note: Patients with a global deterioration of health status requiring discontinuation of treatment without objective evidence of disease progression at that time should be reported as “*symptomatic deterioration.”* Every effort should be made to document the objective progression even after discontinuation of treatment. | | | | |

**For Patients with Non-Measurable Disease (*i.e.*, Non-Target Disease)**

|  |  |  |
| --- | --- | --- |
| **Non-Target Lesions** | **New Lesions** | **Overall Response** |
| CR | No | CR |
| Non-CR/non-PD | No | Non-CR/non-PD\* |
| Not all evaluated | No | not evaluated |
| Unequivocal PD | Yes or No | PD |
| Any | Yes | PD |
| * ‘Non-CR/non-PD’ is preferred over ‘stable disease’ for non-target disease since SD is increasingly used as an endpoint for assessment of efficacy in some trials so to assign this category when no lesions can be measured is not advised | | |

* + 1. Duration of Response

Duration of overall response: The duration of overall response is measured from the time measurement criteria are met for CR or PR (whichever is first recorded) until the first date that recurrent or progressive disease is objectively documented (taking as reference for progressive disease the smallest measurements recorded since the treatment started).

The duration of overall CR is measured from the time measurement criteria are first met for CR until the first date that progressive disease is objectively documented.

Duration of stable disease: Stable disease is measured from the start of the treatment until the criteria for progression are met, taking as reference the smallest measurements recorded since the treatment started, including the baseline measurements.

* + 1. Progression-Free Survival

*Include this section if time to progression or progression-free survival (PFS) is to be used. PFS is defined as the duration of time from start of treatment to time of progression or death, whichever occurs first.*

* + 1. Response Review

*For trials where the response rate is the primary endpoint, it is strongly recommended that all responses be reviewed by an expert(s) independent of the study at the study’s completion. Simultaneous review of the patients’ files and radiological images is the best approach.*

## Antitumor Effect – Hematologic Tumors

*Please provide appropriate criteria for evaluation of response and methods of measurement.*

## Other Response Parameters

*Other endpoints and the criteria for their measurement should be entered below or reference should be made to the protocol section where these criteria may be found.*

# DATA REPORTING / REGULATORY REQUIREMENTS

Adverse event lists, guidelines, and instructions for AE reporting can be found in Section 7.0 (Adverse Events: List and Reporting Requirements).

## Data Reporting

Data collection for this study will be done exclusively through Medidata Rave. Access to the trial in Rave is granted through the iMedidata application to all persons with the appropriate roles assigned in the Regulatory Support System (RSS). To access Rave via iMedidata, the site user must have an active CTEP IAM account (<https://eapps-ctep.nci.nih.gov/iam>) and the appropriate Rave role (Rave CRA, Read-Only, or Site Investigator) on either the Corresponding Organization or Participating Organization roster at the enrolling site.

Upon initial site registration approval for the study in RSS, all persons with Rave roles assigned on the appropriate roster will be sent a study invitation e-mail from iMedidata. To accept the invitation, site users must log into the Select Login (<https://login.imedidata.com/selectlogin>) using their CTEP-IAM user name and password, and click on the “accept” link in the upper right-corner of the iMedidata page. Please note, site users will not be able to access the study in Rave until all required Medidata and study specific trainings are completed. Trainings will be in the form of electronic learnings (eLearnings), and can be accessed by clicking on the link in the upper right pane of the iMedidata screen.

Users that have not previously activated their iMedidata/Rave account at the time of initial site registration approval for the study in RSS will also receive a separate invitation from iMedidata to activate their account. Account activation instructions are located on the CTSU website, Rave tab under the Rave resource materials (Medidata Account Activation and Study Invitation Acceptance). Additional information on iMedidata/Rave is available on the CTSU members’ website under the Rave tab or by contacting the CTSU Help Desk at 1-888-823-5923 or by e-mail at [ctsucontact@westat.com](mailto:ctsucontact@westat.com).

* + 1. Method

*Please use the appropriate text below, if known.*

*For studies assigned for CTMS Comprehensive Monitoring:*  Data will submitted to CTMS at least once every two weeks via Medidata Rave (or other modality if approved by CTEP). Information on CTMS reporting is available at <http://www.theradex.com/CTMS>. Data will be submitted to CTMS at least once every two weeks on the NCI/DCTD case report form or the electronic case report form (ACES). On-site audits will be conducted three times annually (one annual site visit and two data audits). For CTMS monitored studies, after users have activated their accounts, please contact the Theradex Help Desk at (609) 799-7580 or by email at [ctms@theradex.com](mailto:ctms@theradex.com) for additional support with Rave and completion of CRFs.

*For studies assigned for CTMS Routine Monitoring:* Data is to be submitted to CTMS at least once every two weeks via Medidata Rave (or other modality if approved by CTEP). Information on CTMS reporting is available at: <http://www.theradex.com/CTMS>. On-site audits will be conducted on a 18-36 month basis as part of routine cancer center site visits. More frequent audits may be conducted if warranted by accrual or due to concerns regarding data quality or timely submission.

*OR*

*For legacy trials (activated prior to March 1, 2014, that are not in Theradex’s instances of Medidata Rave):* This study will be monitored by the Clinical Data Update System (CDUS) Version 3.0. Cumulative protocol- and patient-specific CDUS data will be submitted electronically to CTEP on a quarterly basis, either by FTP burst of data or via the CDS web application. Reports are due January 31, April 30, July 31, and October 31. Instructions for submitting data using the CDUS can be found on the CTEP Web site

(<http://ctep.cancer.gov/reporting/cdus.html>).

*For protocols including advanced imaging, please specify ALL requirements, timing, mechanisms, systems, and backups to be used for recording data to CRFs and reporting data to NCI. Include description of local or centralized image review.*

* + 1. Responsibility for Data Submission

*Suggested text is provided below which can be modified as necessary.*

For ETCTN trials, it is the responsibility of the PI(s) at the site to ensure that all investigators at the ETCTN Sites understand the procedures for data submission for each ETCTN protocol and that protocol specified data are submitted accurately and in a timely manner to the CTMS via the electronic data capture system, Medidata Rave.

Data are to be submitted via Medidata Rave to CTMS on a real-time basis, but no less than once every 2 weeks. The timeliness of data submissions and timeliness in resolving data queries will be tracked by CTMS. Metrics for timeliness will be followed and assessed on a quarterly basis. For the purpose of Institutional Performance Monitoring, data will be considered delinquent if it is greater than 4 weeks past due.

Data from Medidata Rave and CTEP-AERS is reviewed by the CTMS on an ongoing basis as data is received. Queries will be issued by CTMS directly within Rave. The queries will appear on the Task Summary Tab within Rave for the CRA at the ETCTN to resolve. Monthly web-based reports are posted for review by the Drug Monitors in the IDB, CTEP. Onsite audits will be conducted by the CTMS to ensure compliance with regulatory requirements, GCP, and NCI policies and procedures with the overarching goal of ensuring the integrity of data generated from NCI-sponsored clinical trials, as described in the ETCTN Program Guidelines, which may be found on the CTEP (<http://ctep.cancer.gov/protocolDevelopment/electronic_applications/adverse_events.htm>) and CTSU websites.

An End of Study CRF is to be completed by the PI, and is to include the recommended phase 2 dose (RP2D), and a description of any dose-limiting toxicities (DLTs). CTMS will utilize a core set of eCRFs that are Cancer Data Standards Registry and Repository (caDSR) compliant (<http://cbiit.nci.nih.gov/ncip/biomedical-informatics-resources/interoperability-and-semantics/metadata-and-models>). Customized eCRFs will be included when appropriate to meet unique study requirements. The PI is encouraged to review the eCRFs, working closely with CTMS to ensure prospectively that all required items are appropriately captured in the eCRFs prior to study activation. CTMS will prepare the eCRFs with built-in edit checks to the extent possible to promote data integrity.

CDUS data submissions for ETCTN trials activated after March 1, 2014, will be carried out by the CTMS contractor, Theradex. CDUS submissions are performed by Theradex on a monthly basis. The trial’s lead institution is responsible for timely submission to CTMS via Rave, as above.

Further information on data submission procedures can be found in the ETCTN Program Guidelines (<http://ctep.cancer.gov/protocolDevelopment/electronic_applications/adverse_events.htm>).

See Section 12.1.1 for details on CDUS reporting. As the data management center for this trial, Theradex is responsible for compiling and submitting CDUS data to CTEP for all participants and for providing the data to the Principal Investigator for review.

## CTEP Multicenter Guidelines

*The below guidelines must be followed for studies that are* ***not*** *using the CTSU/OPEN rostered model. Suggested text is provided below which can be modified as necessary. If this study uses CTSU/OPEN, or if this study is being performed within a single institution, this section should be marked “N/A” and the text below deleted.*

This protocol will adhere to the policies and requirements of the CTEP Multicenter Guidelines. The specific responsibilities of the Principal Investigator and the Coordinating Center (Study Coordinator) and the procedures for auditing are presented in Appendix B.

The Principal Investigator/Coordinating Center is responsible for distributing all IND Action Letters or Safety Reports received from CTEP to all participating institutions for submission to their individual IRBs for action as required. Submit documentation of reportable adverse events to [CTSUprotocol@westat.com](mailto:CTSUprotocol@westat.com) and state in the subject line “Safety Report for *NCI protocol #*” or “Action Letter for *NCI protocol #*”, as appropriate. A brief summary cover page on Coordinating Center letterhead is encouraged. These documents will be posted to the CTSU protocol web page and included in the next CTSU bi-monthly broadcast.

Except in very unusual circumstances, each participating institution will order DCTD-supplied agents directly from CTEP. Agents may be ordered by a participating site only after the initial IRB approval for the site has been forwarded to the CTSU Regulatory Office as detailed in the Site Registration section of this protocol. The CTSU Regulatory Office will enter and track IRB approval information in the CTSU Regulatory Support System (RSS) where it will be transmitted to CTEP for fulfillment of agent requests.

## Collaborative Agreements Language

*If a study agent is provided by CTEP under a Collaborative Agreement [Cooperative Research and Development Agreement (CRADA), Clinical Trials Agreement (CTA), Agent-CRADA or Clinical Supply Agreement (CSA)] with the Pharmaceutical Company, this section must be included in the protocol. Information on the study agent’s Agreement status will be provided in the approved LOI response. If no Collaborative Agreement applies to the investigational study agent, this section should be marked “N/A” and the text below deleted.*

The agent(s) supplied by CTEP, DCTD, NCI used in this protocol is/are provided to the NCI under a Collaborative Agreement (CRADA, CTA, CSA) between the Pharmaceutical Company(ies) (hereinafter referred to as “Collaborator(s)”) and the NCI Division of Cancer Treatment and Diagnosis. Therefore, the following obligations/guidelines, in addition to the provisions in the “Intellectual Property Option to Collaborator”

(<http://ctep.cancer.gov/industryCollaborations2/intellectual_property.htm>) contained within the terms of award, apply to the use of the Agent(s) in this study:

1. Agent(s) may not be used for any purpose outside the scope of this protocol, nor can Agent(s) be transferred or licensed to any party not participating in the clinical study. Collaborator(s) data for Agent(s) are confidential and proprietary to Collaborator(s) and shall be maintained as such by the investigators. The protocol documents for studies utilizing Agents contain confidential information and should not be shared or distributed without the permission of the NCI. If a copy of this protocol is requested by a patient or patient’s family member participating on the study, the individual should sign a confidentiality agreement. A suitable model agreement can be downloaded from: <http://ctep.cancer.gov>.

2. For a clinical protocol where there is an investigational Agent used in combination with (an)other Agent(s), each the subject of different Collaborative Agreements, the access to and use of data by each Collaborator shall be as follows (data pertaining to such combination use shall hereinafter be referred to as "Multi-Party Data”):

a. NCI will provide all Collaborators with prior written notice regarding the existence and nature of any agreements governing their collaboration with NCI, the design of the proposed combination protocol, and the existence of any obligations that would tend to restrict NCI's participation in the proposed combination protocol.

b. Each Collaborator shall agree to permit use of the Multi-Party Data from the clinical trial by any other Collaborator solely to the extent necessary to allow said other Collaborator to develop, obtain regulatory approval or commercialize its own Agent.

c. Any Collaborator having the right to use the Multi-Party Data from these trials must agree in writing prior to the commencement of the trials that it will use the Multi-Party Data solely for development, regulatory approval, and commercialization of its own Agent.

3. Clinical Trial Data and Results and Raw Data developed under a Collaborative Agreement will be made available to Collaborator(s), the NCI, and the FDA, as appropriate and unless additional disclosure is required by law or court order as described in the IP Option to Collaborator (<http://ctep.cancer.gov/industryCollaborations2/intellectual_property.htm>). Additionally, all Clinical Data and Results and Raw Data will be collected, used and disclosed consistent with all applicable federal statutes and regulations for the protection of human subjects, including, if applicable, the *Standards for Privacy of Individually Identifiable Health Information* set forth in 45 C.F.R. Part 164.

4. When a Collaborator wishes to initiate a data request, the request should first be sent to the NCI, who will then notify the appropriate investigators (Group Chair for Cooperative Group studies, or PI for other studies) of Collaborator's wish to contact them.

5. Any data provided to Collaborator(s) for Phase 3 studies must be in accordance with the guidelines and policies of the responsible Data Monitoring Committee (DMC), if there is a DMC for this clinical trial.

6. Any manuscripts reporting the results of this clinical trial must be provided to CTEP by the Group office for Cooperative Group studies or by the principal investigator for non-Cooperative Group studies for immediate delivery to Collaborator(s) for advisory review and comment prior to submission for publication. Collaborator(s) will have 30 days from the date of receipt for review. Collaborator shall have the right to request that publication be delayed for up to an additional 30 days in order to ensure that Collaborator’s confidential and proprietary data, in addition to Collaborator(s)’s intellectual property rights, are protected. Copies of abstracts must be provided to CTEP for forwarding to Collaborator(s) for courtesy review as soon as possible and preferably at least three (3) days prior to submission, but in any case, prior to presentation at the meeting or publication in the proceedings. Press releases and other media presentations must also be forwarded to CTEP prior to release. Copies of any manuscript, abstract and/or press release/ media presentation should be sent to:

Email: [ncicteppubs@mail.nih.gov](mailto:ncicteppubs@mail.nih.gov)

The Regulatory Affairs Branch will then distribute them to Collaborator(s). No publication, manuscript or other form of public disclosure shall contain any of Collaborator’s confidential/ proprietary information.

# STATISTICAL CONSIDERATIONS

## Study Design/Endpoints

*Please specify the study design and primary endpoints. Include information on how toxicity will be graded and reported, and state that all patients who receive any amount of the study drug will be evaluable for toxicity. Precisely define the dose escalation scheme and MTD definition (or refer to the section where they are defined). Accelerated escalation designs with intrapatient dose escalation are encouraged. An example can be found on the following Web site (*[*http://linus.nci.nih.gov/~brb/Methodologic.htm*](http://linus.nci.nih.gov/~brb/Methodologic.htm)*)*. *If an optimal biologic dose will be determined in place of or in addition to the MTD, precisely define how this will be done.*

*For recommendations regarding Phase 1 studies, please see the following reference:*

*Ivy SP, L Siu, E Garrett-Mayer, and L Rubinstein. (2010). Approaches to phase I clinical trial design focused on safety, efficiency, and selected patient populations: A report from the Clinical Trial Design Task Force of the National Cancer Institute Investigational Drug Steering Committee. Clin Cancer Res. 16(6):1726.*

*URL:* [*http://clincancerres.aacrjournals.org/content/16/6/1726.abstract*](http://clincancerres.aacrjournals.org/content/16/6/1726.abstract)

*For recommendations regarding Phase 2 studies, please see the following reference:*

*Seymour L, SP Ivy, D Sargent, et al. (2010). The design of phase II clinical trials testing cancer therapeutics: Consensus recommendations from the Clinical Trial Design Task Force of the National Cancer Institute Investigational Drug Steering Committee. Clin Cancer Res. 16(6):1764.*

*URL:* [*http://clincancerres.aacrjournals.org/content/16/6/1764.abstract*](http://clincancerres.aacrjournals.org/content/16/6/1764.abstract)

*Additional recommendations for phase 1 and 2 trials can be found on the CTEP website:* [*http://ctep.cancer.gov/*](http://ctep.cancer.gov/)

## Sample Size/Accrual Rate

*Please specify the planned sample size and accrual rate (*e.g.*, patients/month)*. *Add information regarding advanced imaging sample size as appropriate.*

*In accordance with NIH policy, the inclusion of women and members of minority groups and their subpopulations must be addressed in developing a research design appropriate to the scientific objectives of the study. The Research Plan should describe the composition of the proposed study population in terms of sex/gender, race, and ethnicity, and provide a rationale for selection of subjects. Please see* [*http://grants.nih.gov/grants/funding/phs398/phs398.pdf*](http://grants.nih.gov/grants/funding/phs398/phs398.pdf)*.*

*The NCI suggests that the accrual targets be based on data from similar trials completed by your organization during the previous 5 years. It is hoped that the accrual targets will resemble the gender, ethnic, and racial composition of the U.S. population as closely as possible. Please see the Protocol Submission Worksheet (*[*http://ctep.cancer.gov/forms/docs/psw.docx*](http://ctep.cancer.gov/forms/docs/psw.docx)*)* *for a complete description of ethnic and racial categories and a sample table (which is also provided below).*

*Enter actual estimates, whole numbers only (percentages, fractions, or decimals are not acceptable). Note in some cases, an acceptable response is “Do Not Wish to Provide.”*

**PLANNED ENROLLMENT REPORT**

| Racial Categories | Ethnic Categories | | | | Total |
| --- | --- | --- | --- | --- | --- |
| Not Hispanic or Latino | | Hispanic or Latino | |
|  | Female | Male | Female | Male |  |
| American Indian/ Alaska Native |  |  |  |  |  |
| Asian |  |  |  |  |  |
| Native Hawaiian or Other Pacific Islander |  |  |  |  |  |
| Black or African American |  |  |  |  |  |
| White |  |  |  |  |  |
| More Than One Race |  |  |  |  |  |
| Total |  |  |  |  |  |

PHS 398 / PHS 2590 (Rev. 08/12 Approved Through 8/31/2015) OMB No. 0925-0001/0002

## Stratification Factors

*Please specify any planned patient stratification factors. Indicate whether dose escalation and MTD determination will be done for each stratum individually.*

## Analysis of Secondary Endpoints

*If secondary endpoints are included in this study, please specify how they will be analyzed. In particular, brief descriptions should be given of analyses of pharmacokinetic, biologic, and correlative laboratory endpoints.*

*If responses are reported as a secondary endpoint, the following criteria should be used. Every report should contain all patients included in the study. For the response calculation, the report should contain at least a section with all eligible patients. Another section of the report may detail the response rate for evaluable patients only. However, a response rate analysis based on a subset of patients must explain which patients were excluded and for which reasons. It is preferred that 95% confidence limits are given.*

## *For phase 2 protocols only:* Reporting and Exclusions

* + 1. Evaluation of Toxicity

All patients will be evaluable for toxicity from the time of their first treatment with *[CTEP and/or CIP IND Agent(s)].*

* + 1. Evaluation of Response

All patients included in the study must be assessed for response to treatment, even if there are major protocol treatment deviations or if they are ineligible. Each patient will be assigned one of the following categories: 1) complete response, 2) partial response, 3) stable disease, 4) progressive disease, 5) early death from malignant disease, 6) early death from toxicity, 7) early death because of other cause, or 9) unknown (not assessable, insufficient data). [Note: By arbitrary convention, category 9 usually designates the “unknown” status of any type of data in a clinical database.]

All of the patients who met the eligibility criteria (with the possible exception of those who received no study medication) should be included in the main analysis of the response rate. Patients in response categories 4-9 should be considered to have a treatment failure (disease progression). Thus, an incorrect treatment schedule or drug administration does not result in exclusion from the analysis of the response rate. Precise definitions for categories 4-9 will be protocol specific.

All conclusions should be based on all eligible patients. Subanalyses may then be performed on the basis of a subset of patients, excluding those for whom major protocol deviations have been identified (*e.g.*, early death due to other reasons, early discontinuation of treatment, major protocol violations, etc.). However, these subanalyses may not serve as the basis for drawing conclusions concerning treatment efficacy, and the reasons for excluding patients from the analysis should be clearly reported. The 95% confidence intervals should also be provided.

# Study Status Updates and Study Closure

## Definitions of Study Status Changes

* + 1. Temporarily Closed to Accrual

The study status is Temporarily Closed to Accrual when no patient slots are currently available, but there is the possibility that the trial will re-open for accrual (patient slots become available). Sites are not permitted to accrue additional patients until CTEP is notified of Re-Activation.

Study status will need to be changed to Temporarily Closed to Accrual when any of the following criteria are met:

*Use or modify any of the following criteria and/or supply your own study-specific criteria, if not already described in a more appropriate section (*e.g*., any stopping rules that may be defined in the Statistical Considerations section):*

* Sites are notified by CTEP (via Request for Rapid Amendment [RRA]) of changes in the risk/benefit ratio that necessitate changes to the patient Informed Consent document. Requested changes will be specified in the RRA and must be reviewed by the study’s IRB.
* CTEP and the lead investigator agree that unacceptable toxicities necessitate a discussion to change the dosing/regimen.
* A protocol-defined benchmark has been achieved (such as an interim analysis before proceeding to the next stage).
* Investigators encounter any of the stopping criteria described in Section *x.x*.
  + 1. Closed to Accrual

The study status is (permanently) Closed to Accrual when no more patient enrollment slots are available, and at least one patient is still actively receiving the study treatment. Sites are no longer permitted to enroll additional patients.

Patient slots are no longer available when the following criteria are met:

*Use or modify any of the following criteria and/or supply your own study-specific criteria, if not already described in a more appropriate section (*e.g.*, stopping rules in Section 13, Statistical Considerations):*

* The pre-specified number of evaluable patients has been successfully enrolled, treated, and evaluated.
* The study treatment has failed to meet the pre-specified efficacy goal at the stage 1 interim analysis.
* CTEP and the investigators agree that unacceptable toxicities preclude further enrollment.
* Investigators encounter any of the stopping criteria described in Section *x.x*.
  + 1. Closed to Accrual and Treatment

The study status is Closed to Accrual and Treatment when no more patient enrollment slots are available and no patients are currently receiving the study treatment. Patients may still be enrolled on the protocol only for the purposes of follow-up.

Patient accrual and treatment will be permanently halted when any of the following criteria are met:

*Use or modify any of the following criteria and/or supply your own study-specific criteria, if not already described in a more appropriate section (*e.g.*, stopping rules in Section 13, Statistical Considerations):*

* Enrollment was previously closed (study status of “Closed to Accrual”), and no patients are receiving the study treatment.
* CTEP and the investigators agree that unacceptable toxicities preclude further enrollment. In this case, CTEP and the investigators must collaborate to alter the regimen or to halt the study treatment altogether as soon as it can be safely done for patients currently receiving treatment.

CTEP and Theradex **must be notified** when patients are no longer receiving treatment [*i.e.*, when the last patient(s) to be receiving treatment is/are no longer receiving the study regimen for any reason].

* + 1. Closed to Follow-Up

The study is considered Closed to Follow-Up when all protocol-defined follow-up procedures have been completed for all patients who have not been removed from the study for other reasons. That is, there are no outstanding follow-up procedures to be performed as mandated by the protocol.

CTEP does **not** need to be notified of a status change to “Closed to Follow Up.”

* + 1. Complete

Study is considered Complete if it has been at least thirty (30) days since the last patient follow-up evaluation.

A citation to a final study report (manuscript, meeting abstract, etc.) is required with the submission of the Protocol Status Update Form to CTEP PIO.

## Responsibility for Filing Protocol Status Update Forms

CTEP must be notified of all study status changes in Section 14.1 (except for Closed to Follow-Up) by the Corresponding Organization via Protocol Status Update Form, available from the CTEP website at <http://ctep.cancer.gov/protocolDevelopment/default.htm#amendments>.

Theradex must be notified as soon as all patients are off treatment (*i.e.*, when study status changes to Closed to Accrual and Treatment). Theradex will produce a report within 90 days of this notification.

# REFERENCES

*Please provide the citations for all publications referenced in the text.*

# APPENDIX A PERFORMANCE STATUS CRITERIA

|  |  |  |  |
| --- | --- | --- | --- |
| **ECOG Performance Status Scale** | | **Karnofsky Performance Scale** | |
| Grade | Descriptions | Percent | Description |
| 0 | Normal activity. Fully active, able to carry on all pre-disease performance without restriction. | 100 | Normal, no complaints, no evidence of disease. |
| 90 | Able to carry on normal activity; minor signs or symptoms of disease. |
| 1 | Symptoms, but ambulatory. Restricted in physically strenuous activity, but ambulatory and able to carry out work of a light or sedentary nature (*e.g.*, light housework, office work). | 80 | Normal activity with effort; some signs or symptoms of disease. |
| 70 | Cares for self, unable to carry on normal activity or to do active work. |
| 2 | In bed <50% of the time. Ambulatory and capable of all self-care, but unable to carry out any work activities. Up and about more than 50% of waking hours. | 60 | Requires occasional assistance, but is able to care for most of his/her needs. |
| 50 | Requires considerable assistance and frequent medical care. |
| 3 | In bed >50% of the time. Capable of only limited self-care, confined to bed or chair more than 50% of waking hours. | 40 | Disabled, requires special care and assistance. |
| 30 | Severely disabled, hospitalization indicated. Death not imminent. |
| 4 | 100% bedridden. Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair. | 20 | Very sick, hospitalization indicated. Death not imminent. |
| 10 | Moribund, fatal processes progressing rapidly. |
| 5 | Dead. | 0 | Dead. |

# APPENDIX B CTEP MULTICENTER GUIDELINES FOR NON-ETCTN TRIALS

If an institution wishes to collaborate with other participating institutions in performing a CTEP-sponsored research protocol that does **not** use the CTSU/OPEN rostered model, then the guidelines below must be followed.

Responsibility of the Protocol Chair

* The Protocol Chair will be the single liaison with the CTEP Protocol and Information Office (PIO). The Protocol Chair is responsible for the coordination, development, submission, and approval of the protocol as well as its subsequent amendments. The protocol must not be rewritten or modified by anyone other than the Protocol Chair. There will be only one version of the protocol, and each participating institution will use that document. The Protocol Chair is responsible for assuring that all participating institutions are using the correct version of the protocol.
* The Protocol Chair is responsible for the overall conduct of the study at all participating institutions and for monitoring its progress. All reporting requirements to CTEP are the responsibility of the Protocol Chair.
* The Protocol Chair is responsible for the timely review of Adverse Events (AE) to assure safety of the patients.
* The Protocol Chair will be responsible for the review of and timely submission of data for study analysis.

Responsibilities of the Coordinating Center

* Each participating institution will have an appropriate assurance on file with the Office for Human Research Protection (OHRP), NIH.The Coordinating Center is responsible for assuring that each participating institution has an OHRP assurance and must maintain copies of IRB approvals from each participating site.
* Prior to the activation of the protocol at each participating institution, an OHRP form 310 (documentation of IRB approval) must be submitted to the CTSU Regulatory Office along with any other protocol-specific regulatory documentation required by that study. The CTSU Regulatory Office will track receipt in the CTSU Regulatory Support System (RSS) and, once all requirements are met, set the institution status to “approved” in the RSS.
* The Coordinating Center is responsible for central patient registration. The Coordinating Center is responsible for assuring that IRB approval has been obtained at each participating site prior to the first patient registration from that site.
* The Coordinating Center is responsible for the preparation of all submitted data for review by the Protocol Chair.
* The Coordinating Center will maintain documentation of AE reports. There are two options for AE reporting: (1) participating institutions may report directly to CTEP with a copy to the Coordinating Center, or (2) participating institutions report to the Coordinating Center who in turn report to CTEP. The Coordinating Center will submit AE reports to the Protocol Chair for timely review.
* Audits may be accomplished in one of two ways: (1) source documents and research records for selected patients are brought from participating sites to the Coordinating Center for audit, or (2) selected patient records may be audited on-site at participating sites. If the NCI chooses to have an audit at the Coordinating Center, then the Coordinating Center is responsible for having all source documents, research records, all IRB approval documents, NCI Drug Accountability Record forms, patient registration lists, response assessments scans, x-rays, etc. available for the audit.

Inclusion of Multicenter Guidelines in the Protocol

* The protocol must include the following minimum information:
* The title page must include the name and address of each participating institution and the name, telephone number and e-mail address of the responsible investigator at each participating institution.
* The Coordinating Center must be designated on the title page.
* Central registration of patients is required. The procedures for registration must be stated in the protocol.
* Data collection forms should be of a common format. Sample forms should be submitted with the protocol. The frequency and timing of data submission forms to the Coordinating Center should be stated.
* Describe how AEs will be reported from the participating institutions, either directly to CTEP or through the Coordinating Center.
* Describe how Safety Reports and Action Letters from CTEP will be distributed to participating institutions.

Agent Ordering

* Except in very unusual circumstances, each participating institution will order DCTD-supplied investigational agents directly from CTEP. Investigational agents may be ordered by a participating site only after the initial IRB approval for the site has been forwarded by the Coordinating Center to the CTEP PIO.

# APPENDIX C INFORMATION ON POSSIBLE DRUG INTERACTIONS

**Information on Possible Interactions with Other Agents for Patients and Their Caregivers and Non-Study Healthcare Team**

*[Note to investigators: This appendix consists of an “information sheet” to be handed to the patient at the time of enrollment. Use or modify the text as appropriate for the study agent, so that the patient is aware of the risks and can communicate with their regular prescriber(s) and pharmacist. A convenient wallet-sized information card is also included for the patient to clip out and retain at all times. If you choose to use them, please note that the information sheet and wallet card will require IRB approval before distribution to patients.]*

*The patient \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is enrolled on a clinical trial using the experimental agent* **[agent name]***. This clinical trial is sponsored by the National Cancer Institute. This form is addressed to the patient, but includes important information for others who care for this patient.*

*[Agent name]* interacts with many drugs that are processed by your liver. Because of this, it is very important to tell your study doctors about all of your medicine before you start this study. It is also very important to tell them if you stop taking any regular medicine, or if you start taking a new medicine while you take part in this study. When you talk about your medicine with your study doctor, include medicine you buy without a prescription at the drug store (over-the-counter remedy), or herbal supplements such as St. John’s wort.

Many health care prescribers can write prescriptions. You must also tell your other prescribers (doctors, physicians’ assistants or nurse practitioners) that you are taking part in a clinical trial. **Bring this paper with you and keep the attached information card in your wallet**. These are the things that you and they need to know:

*[Use or delete sections below as appropriate.]*

*[Agent name]* interacts with (a) certain specific enzyme(s) in your liver.

* The enzyme(s) in question is/are ***[name(s) of CYP isoenzyme(s)]***, and *[insert brief, easy explanation of the nature of the interaction,* i.e., *for inducers: “[agent name] is broken down by this enzyme in order to be cleared from your system.”]*
* *[Agent name]* must be used very carefully with other medicines that need these liver enzymes to be effective or to be cleared from your system.
* Other medicines may also affect the activity of the enzyme.
  + *[The following text is for agents that are metabolized/cleared by the enzyme.]* Substances that increase the enzyme’s activity (“inducers”) could reduce the effectiveness of the drug, while substances that decrease the enzyme’s activity (“inhibitors”) could result in high levels of the active drug, increasing the chance of harmful side effects.
  + *[The following text is for when the agent requires the enzyme in order to be converted from prodrug to active drug.]* Substances that increase the enzyme’s activity (“inducers”) could result in high levels of the active drug, increasing the chance of harmful side effects, while substances that decrease the enzyme’s activity (“inhibitors”) could reduce the effectiveness of the drug.
  + *[The following text is for when the study agent modulates the enzyme activity.]* *[Agent name]* is considered a(n) “[inducer/inhibitor]”of the enzyme, meaning that it can affect the levels of other drugs that are processed by that enzyme. This can lead to harmful side effects and/or reduce the effectiveness of those medications.
* You and healthcare providers who prescribe drugs for you must be careful about adding or removing any drug in this category.
* Before you start the study, your study doctor will work with your regular prescriber to switch any medicines that are considered “strong inducers/inhibitors or substrates of ***[name(s) of CYP isoenzyme(s)]***.”
* Your prescribers should look at this web site <http://medicine.iupui.edu/clinpharm/ddis/> or consult a medical reference to see if any medicine they want to prescribe is on a list of drugs to avoid.
* Please be very careful! Over-the-counter drugs have a brand name on the label—it’s usually big and catches your eye. They also have a generic name—it’s usually small and located above or below the brand name, and printed in the ingredient list. Find the generic name and determine, with the pharmacist’s help, whether there could be an adverse interaction.
* *[The following are* ***examples*** *of text for common over-the-counter medications or supplements that may interact with the study agent.]* Be careful:
* If you take acetaminophen regularly: You should not take more than 4 grams a day if you are an adult or 2.4 grams a day if you are older than 65 years of age. Read labels carefully! Acetaminophen is an ingredient in many medicines for pain, flu, and cold.
* If you drink grapefruit juice or eat grapefruit: Avoid these until the study is over.
* If you take herbal medicine regularly: You should not take St. John’s wort while you are taking *[agent name]*.
* *[Add other specific medications here, if necessary.]*

Other medicines can be a problem with your study drugs.

* + - You should check with your doctor or pharmacist whenever you need to use an over-the-counter medicine or herbal supplement.
    - Your regular prescriber should check a medical reference or call your study doctor before prescribing any new medicine for you. Your study doctor’s name is

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

and he or she can be contacted at

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** interacts with a specific liver enzyme called **CYP\_\_\_\_\_\_**, and must be used very carefully with other medicines that interact with this enzyme.

* Before you start the study, your study doctor will work with your regular prescriber to switch any medicines that are considered “strong inducers/inhibitors or substrates of **CYP\_\_\_\_\_\_**.”
* Before prescribing new medicines, your regular prescribers should go to <http://medicine.iupui.edu/clinpharm/ddis/> for a list of drugs to avoid, or contact your study doctor.
* Your study doctor’s name is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** and can be contacted at **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**INFORMATION ON POSSIBLE DRUG INTERACTIONS**

You are enrolled on a clinical trial using the experimental agent **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** This clinical trial is sponsored by the NCI.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** interacts with drugs that are processed by your liver. Because of this, it is very important to:

* Tell your doctors if you stop taking regular medicine or if you start taking a new medicine.
* Tell all of your prescribers (doctor, physicians’ assistant, nurse practitioner, pharmacist) that you are taking part in a clinical trial.
* Check with your doctor or pharmacist whenever you need to use an over-the-counter medicine or herbal supplement.



# APPENDIX D BIOASSAY TEMPLATES

*If the protocol includes any* ***integral*** *biomarker studies using* in situ *hybridization (ISH), immunohistochemistry (IHC), and/or DNA-based mutation assays, you may fill out the appropriate template (found at* [*http://www.cancerdiagnosis.nci.nih.gov/diagnostics/templates.htm*](http://www.cancerdiagnosis.nci.nih.gov/diagnostics/templates.htm)*) and attach to this protocol submission as separate Appendices.*

*If the laboratory or laboratories performing the studies has an alternatively-formatted document that supplies the same level of information regarding validation, materials and methods,* etc*., it may be used instead of the templates.*