

National Cancer Institute

Cancer Imaging Program

Protocol Template Components and General Requirements for Studies that will use [F-18]FMISO

Under the NCI CIP-held IND # 76,042

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This Document Contains

General requirements for protocols & consents for studies using the radiopharmaceutical [F-18]FMISO  
in qualifying studies

and

[F-18]FMISO related prompts, suggestions, and sample content that may be used for guidance, IN  
ADDITION TO EXISTING NCI/CTEP PROTOCOL DEVELOPMENT TEMPLATES AND TOOLS,  
to develop a new protocol for an NCI study that will use [F-18]FMISO.

## General Protocol & Consent Requirements:

1. The IND holder [e.g. NCI], and the specific IND number under which this investigational radiopharmaceutical PET agent will be provided, must be explicitly stated in an appropriate and prominent place in the opening sections of the protocol.
2. [F-18]FMISO must be clearly identified as an investigational agent, per se, in the protocol and consent, and [F-18]FMISO must appear in the 'investigational agent' section, or equivalent, of the protocol.
3. The distinction between the following must remain clear throughout the protocol and consent:
  - standard of care imaging [e.g. FDG-PET scans that are non-study specific].
  - study specific [research] use of standard imaging [e.g. FDG-PET scans added solely for the study].
  - inherently investigational imaging [e.g. any FMISO-PET scans].

**Referring to FMISO-PET scans as ‘study specific’ procedures [i.e., like an additional standard CT or MRI might be described] is NOT, by itself, adequate, as FMISO-PET is currently investigational.**

4. [F-18]FMISO risks must be consistent with the current applicable Investigator’s Brochure, which may be obtained by forwarding a request to [NCICIPINDAGENTS@mail.nih.gov](mailto:NCICIPINDAGENTS@mail.nih.gov).

## Template Text Conventions & Comments:

- Sample/Suggested template text and placeholders appear as normal/**bold** text.
- Prompts for possible insertion or substitution of study specific information appear in underline highlight or [brackets with yellow highlight].

**THE TEMPLATE BEGINS ON THE NEXT PAGE**

## [Document Identification]

### TABLE OF CONTENTS

**SCHEMA** [Please indicate, in schema, when FMISO-PET will be performed in the study]

### STUDY AIMS/RATIONALE/OBJECTIVES

Primary Objective [Please Specify FMISO Primary Objective if applicable]

Secondary/Exploratory Objective [Please Specify FMISO Secondary/Exploratory Objective if applicable]

**SAMPLE SIZE** [Please add information regarding FMISO-PET as appropriate]

**ABSTRACT** [Please add information regarding FMISO-PET as appropriate]

**BACKGROUND** [Please add information regarding FMISO-PET as appropriate]

### IMAGING AGENT INFORMATION

**For complete information, please refer to the current Investigator's Brochure:** [Insert title, version and date of NCI IB] [NOTE: to obtain the most current IB contact [NCICIPINDAGENTS@mail.nih.gov](mailto:NCICIPINDAGENTS@mail.nih.gov) .]

Pharmacology and Toxicology: [Insert appropriate text from the current Investigator's Brochure]

Toxicity of FMISO in Humans: [Insert appropriate text from the current Investigator's Brochure]

Dosimetry: [Insert appropriate text from the current Investigator's Brochure]

Previous Human [F-18]FMISO Imaging Studies: [Insert appropriate text from the current Investigator's Brochure]

[F-18]FMISO Administered Dose:

[F-18]FMISO will be administered to subjects over 1 minute by intravenous bolus injection. Doses will be pre-calibrated to [      mCi or      mCi/kg], with a dose range of [      ]. The dose will not exceed      mCi total.

Quality Assurance, Quality Control and Storage:

In accordance with regulations, the radioisotope vendor conducts several quality control tests on the [F-18] FMISO product prior to release for human administration. Once delivered to the participating institution, doses will be stored in the appropriate storage area in the nuclear medicine facility until they are administered to the patient on the same day.

Supplier of [F-18]FMISO:

Drug Ordering:

[F-18] FMISO will be purchased from [specify by name and telephone number the NCI IND AUTHORIZED commercial vendor (e.g. PetNet, Cardinal, IBA) of radioisotopes to be used] 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 [F-18] FMISO for this specific trial. The investigational radiopharmaceutical [F-18]FMISO solution will be shipped to the site the same day the participant is to be injected.

The [investigational pharmacist or qualified nuclear medicine technologist] at the participating institution will be the responsible party designated by the investigator.

#### Drug Returns:

If for any reason the study imaging is unable to be completed, sites will allow the radioactivity of the [F-18]FMISO solution to decay and then discard it appropriately per site's policies and procedures, making a record of the event as required. A copy of the policy should be available upon request.

#### Drug Accountability:

The investigator or the investigator-designee must maintain a detailed record of receipt, disposition, and destruction dates of [F-18]FMISO solution, using the [redacted] form appended hereto or available on the web at [redacted].

## STUDY OVERVIEW

### PARTICIPANT SELECTION/ELIGIBILITY CRITERIA

### STUDY PROCEDURES & STUDY CALENDAR [Please include [F-18]FMISO PET events in the study calendar]

### DATA MANAGEMENT/REGISTRATION [Please discuss local or centralized image review]

## IMAGING PROTOCOL

#### [F-18]FMISO Administration:

[F-18]FMISO will be provided by a vendor authorized within the NCI IND. [F-18]FMISO will be administered according to the guidance provided in the most current Investigators Brochure for this IND.

#### [F-18]FMISO-PET Imaging:

[Image Acquisition Details]

[Image Analysis Details]

[Image Interpretation Details]

[Imaging Related Procedures]



## STATISTICAL CONSIDERATIONS

### Reporting and Exclusions:

#### Evaluation of toxicity

All subjects will be evaluable for toxicity from the time of injection of [F-18]FMISO until 24 hours after injection. [See Adverse Event Reporting Section].

#### Reporting Guidelines

[Please Specify ALL requirements, timing, mechanisms, systems, and backups to be used for recording data to CRFs and reporting data to NCI]

#### APPENDIX I

[Current [F-18]FMISO IDB for the NCI held IND]