

INITIAL INVESTIGATIONAL NEW DRUG APPLICATION

IND Title (if title being used)

Serial 0000

Name of Sponsor Investigator, MD  
X Professor, Department  
DARTHMOUTH-HITCHCOCK MEDICAL CENTER

Date of Submission

Name of Project, Initial IND

Sponsor: Name of Investigator, MD

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Completed Form FDA 1571 Form included here

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### **3. INTRODUCTION**

#### **3.1. Introductory Statement**

*This section is brief; usually two to three pages should be sufficient. The information here is intended to place the developmental plan for the drug into perspective and to help FDA anticipate sponsor needs. After your introductory statement, use the headings below to ensure you fulfill all of the requirements. This is also easier for the reviewers to follow. **Maintain all of the headings** in this document and if not applicable to your IND, simply state this.*

##### **3.1.1. Name of the Drug and All Active Ingredients**

##### **3.1.2. Pharmacological Class of the Drug**

##### **3.1.3. Structural Formula of the Drug**

##### **3.1.4. Formulation of the Dosage Forms to be Used**

##### **3.1.5. Route of Administration**

##### **3.1.6. Objectives and Duration of the Proposed Clinical Investigations**

#### **3.2. Summary of Previous Human Experience**

*A brief summary of previous human experience with the drug, with reference to other INDs if pertinent, and to investigational or marketing experience in other countries that may be relevant to the safety of the proposed clinical investigation(s). This topic will be written up in detail in Section 9.*

#### **3.3. Status of Drug in Other Countries**

*If the drug has been withdrawn from investigation or marketing in any country for any reason related to safety or effectiveness, identification of the country(ies) where the drug was withdrawn and the reasons for the withdrawal. For a Sponsor-Investigator IND, you may simply state you are not aware of any withdrawals.*

#### **3.4. References**

*List any references for Section 3*

**4. GENERAL INVESTIGATIONAL PLAN**

**4.1. Rationale**

*The rationale for the drug or research study (the science behind why this is a good idea).*

**4.2. Indication to be Studied**

**4.3. General Approach for Evaluation of Treatment**

**4.4. Description of First Year Trial(s)**

**4.5. Number of Subjects to be Evaluated**

**4.6. Drug Related Risks**

*Any risks of particular severity or seriousness anticipated on the basis of the toxicological data in animals or prior studies in humans with the drug(s) or related drugs.*

**4.7. References**

*List any references for Section 4*

## **5. INVESTIGATOR BROCHURE**

*If this is a single site study, there is no requirement to produce an Investigator Brochure. Otherwise, include the CIB(s). You may also reference Letters of Authorization or the product label for this section. You may omit sections 5.1 – 5.4 if you are citing letters or the label.*

### **5.1. Drug Substance and Formulation**

*A brief description of the drug substance and the formulation, including the structural formula, if known.*

### **5.2. Pharmacological and Toxicological Effects of the Drug**

*A summary of the pharmacological and toxicological effects of the drug in animals and, to the extent known, in humans.*

### **5.3. Safety and Effectiveness of the Drug**

*A summary of information relating to safety and effectiveness in humans obtained from prior clinical studies. (Reprints of published articles on such studies may be appended when useful)*

### **5.4. Risks and Side Effects**

*A description of possible risks and side effects to be anticipated on the basis of prior experience with the drug under investigation or with related drugs, and of precautions or special monitoring to be done as part of the investigational use of the drug.*

**6. PROTOCOL**

**6.1. Study Protocol**

**6.2. Informed Consent**

**6.3. Investigator and Facilities Data**

*Form 1572 and CV of the principal investigator(s). Actually, you are not required to submit form 1572 to the FDA. However, it is the easiest way to collect all the information that must be submitted under 21 CFR 312.23(a)(6)(iii)(b). The alternative is to submit the information as a narrative, but we highly recommend using the form!*



## 7. CHEMISTRY, MANUFACTURING AND CONTROL INFORMATION

*If the investigational drug has been marketed, this section may be covered by providing Package Insert of the drug or referencing the label. Alternatively, you can cover this section with your 'letters of authorization' if using a drug provided by a commercial company. You may omit sections 7.1 – 7.4 if citing letters or labels. However, you must still include the Environmental Assessment section (will become 7.1).*

*Otherwise: Complete the sections below.*

*References to the current edition of the United States Pharmacopeia—National Formulary may satisfy relevant requirements in some of these sections..*

### 7.1. Drug Substance

- (i) A description of the drug substance, including its physical, chemical, or biological characteristics;*
- (ii) the general method of preparation of the drug substance;*
- (iii) the acceptable limits and analytical methods used to assure the identity, strength, quality, and purity of the drug substance; and information sufficient to support stability of the drug substance during the toxicological studies and the planned clinical studies.*

#### 7.1.1. The Name and Address of the Drug Manufacturer

### 7.2. Drug Product

*Reference to the current edition of the United States Pharmacopeia—National Formulary may satisfy certain requirements in this paragraph.*

- (i) A list of all components, which may include reasonable alternatives for inactive compounds, used in the manufacture of the investigational drug product, including both those components intended to appear in the drug product and those which may not appear but which are used in the manufacturing process;*
- (ii) where applicable, the quantitative composition of the investigational drug product, including any reasonable variations that may be expected during the investigational stage;*
- (iii) a brief general description of the manufacturing and packaging procedure as appropriate for the product;*

- (iv) *the acceptable limits and analytical methods used to assure the identity, strength, quality, and purity of the drug product; and information sufficient to assure the product's stability during the planned clinical studies.*

**7.2.1. The Name and Address of the Drug Product Manufacturer**

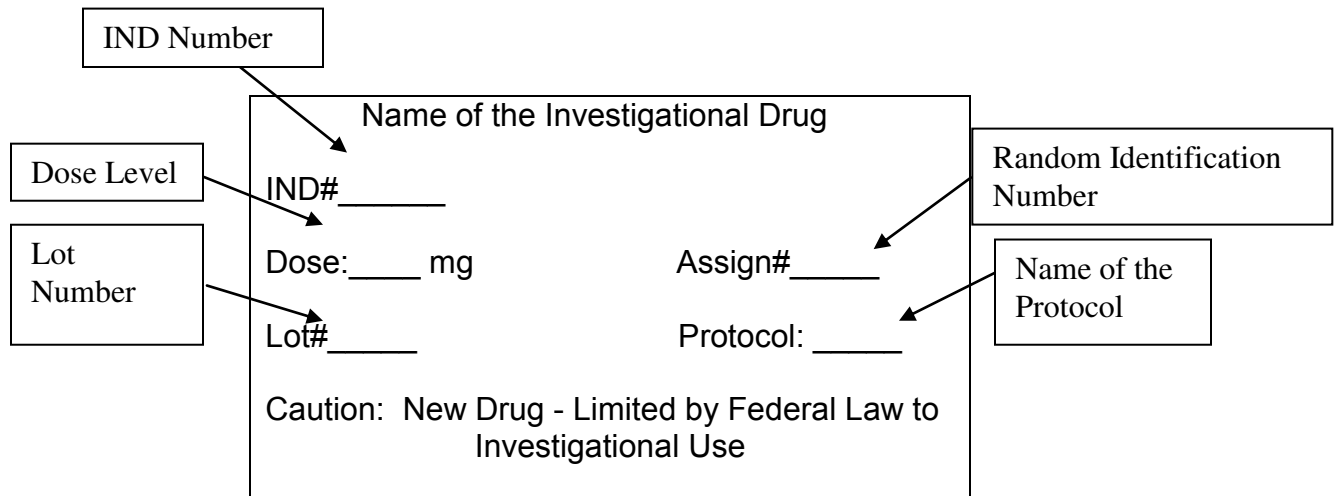
**7.3. Placebo**

*A brief general description of the composition, manufacture and control of any placebo used in a controlled clinical trial.*

**7.4. Labeling**

*A copy of all labels and labeling to be provided to each investigator.*

*Example given bellow:*



**7.5. Environmental Assessment**

*May change to 7.1 if you are omitting 7.1 – 7.4)*

*If no environmental assessment is required, then use this statement:*

*“We request a claim for categorical exclusion for this proposed clinical trial as provided for in 21 CFR.25.31(e) in that the drug shipped under this notice is intended to be used in clinical trials in which the amount of waste expected to enter the environment may reasonably be expected to be non-toxic.”*

## **8. PHARMACOLOGY AND TOXICOLOGY INFORMATION**

### **8.1. Pharmacology and Drug Distribution**

*A section describing the pharmacological effects and mechanism(s) of action of the drug in animal and information on the absorption, distribution, metabolism and excretion of the drug, if known. As was true for Section 7, you may use a package insert or authorization letters or cite the drug label to satisfy much of this section.*

### **8.2. Toxicology**

- (i) *An integrated summary of the toxicological effects of the drug in animals and in vitro. Depending on the nature of the drug and the phase of the investigation, the description is to include the results of acute, subacute and chronic toxicity tests; tests of the drug's effects on reproduction and the developing fetus; any special toxicity test related to the drug's particular mode of administration or conditions of use (e.g., inhalation, dermal, or ocular toxicology); and any in vitro studies intended to evaluate drug toxicity.*
  
- (ii) *For each toxicology study that is intended primarily to support the safety of the proposed clinical investigation, a full tabulation of data suitable.*

### **8.3. Statement of Compliance with GLP**

*For each nonclinical laboratory study subject to the Good Laboratory Practice (GLP) regulations under part 58, a statement that the study was conducted in compliance with the good laboratory practice regulations in part 58. If the study was not conducted in compliance with those regulations, one should provide a brief statement of the reason for the noncompliance.*

## **9. PREVIOUS HUMAN EXPERIENCE**

*A summary of previous human experience with the investigational drug, if any, known to the applicant, should be presented. Simply citing Authorization letters may be appropriate to fulfill this section. If not, the information is required to include the following:*

- (i) If the investigational drug has been investigated or marketed previously, either in the United States or other countries, detailed information about such experience that is relevant to the safety of the proposed investigation or to the investigation's rationale.*
- (ii) If the drug has been the subject of controlled trials, detailed information on such trials that is relevant to an assessment of the drug's effectiveness for the proposed investigational use(s) should also be provided. Any published material that is relevant to the safety of the proposed investigation or to an assessment of the drug's effectiveness for its proposed investigational use should be provided in full. Published material that is less directly relevant may be supplied by a bibliography.*
- (iii) If the drug is a combination of drugs previously investigated or marketed, the information should be provided for each active drug component. However, if any component in such combination is subject to an approved marketing application or is otherwise lawfully marketed in the United States, the sponsor is not required to submit published material concerning that active drug component unless such material relates directly to the proposed investigational use (including publications relevant to component- component interaction).*
- (iv) If the drug(s) has been marketed outside the United States, a list of the countries in which the drug has been marketed and a list of the countries in which the drug has been withdrawn from marketing for reasons potentially related to safety or effectiveness.*

### **9.1. References**

*List any references for Section 9*

## **10. ADDITIONAL INFORMATION**

*In certain applications, as described below, information on special topics may be needed. Such information shall be submitted in this section as follows:*

### **10.1. Drug Dependence and Abuse Potential**

*If the drug is a psychotropic substance or otherwise has abuse potential, a section describing relevant clinical studies and experience and studies in test animals.*

### **10.2. Radioactive Drugs**

*If the drug is a radioactive drug, sufficient data from animal or human studies should be provided, to allow a reasonable calculation of radiation-absorbed dose to the whole body and critical organs upon administration to a human subject. Phase I studies of radioactive drugs must include studies which will obtain sufficient data for dosimetry calculations.*

### **10.3. Pediatric Studies**

*If the investigational drug will be studied in pediatric setting, plans for assessing pediatric safety and effectiveness should be provided.*

### **10.4. Other Information**

*A brief statement of any other information that would aid evaluation of the proposed clinical investigations with respect to their safety or their design and potential as controlled clinical trials to support marketing of the drug.*

**11. RELEVANT INFORMATIONS**

*If requested by FDA, any other relevant information needed for review of the application.*