

LETTER OF INTENT OUTLINE
FOR ANIMAL MODEL QUALIFICATION SUBMISSION
Updated: 10/18/13

A Letter of Intent (LOI) initiates the formal qualification process. Follow the outline below in preparing the LOI. The submission should be concise, generally not more than 7 pages.

1. Administrative Information

- a. Submitters should refer to resources and information at the following link:
<http://www.fda.gov/Drugs/DevelopmentApprovalProcess/DrugDevelopmentToolsQualificationProgram/ucm284078.htm>
- b. Provide submitter name and contact information including Principal Investigator(s), Consortium Group Member(s), associated institutions, regulatory consultants and government agencies.

2. Questions for FDA

3. Overview of the Proposed Animal Model

Qualification implies that a specific species of animal, given a specific challenge agent by a specific route produces a disease process or condition that in multiple important aspects corresponds to the human disease or condition of interest.

- a. Introduction – This should be in abstract form (approximately 500 words). Describe the human disease or condition and the corresponding animal model. Include the following information:
 - i. The etiologic and challenge agents¹.
 - ii. Historical information regarding the existence of animal models for this disease or condition (e.g., there are no models available, there are multiple models).
 - iii. The importance of developing this animal model.
 - iv. The intended use of this animal model in drug² development³.
- b. Human disease or condition – This should be a brief summary of the human disease or condition, including the identification of key features. Include the following information if available; identify gaps in understanding the human disease or condition:
 - i. Etiologic agent
 - ii. Route(s) of exposure

¹ The term *etiologic agent* in this outline, refers to a substance causing disease in humans. The term *challenge agent* refers to a substance used in the animal studies to model the human disease.

² As used in this outline, all references to *drugs* include human drugs, therapeutic biological products, cellular and gene therapies, and vaccines.

³ Qualified animal models are to be used for product development; therefore, the submitter should include one or more of the following possible therapeutic indications with regard to the disease or condition (pre-, post-exposure prophylaxis or treatment).

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- iii. Characteristics of the disease or condition (e.g., time course, signs/symptoms, gross and microscopic lesions)
 - iv. Justification for the use of the Animal Rule regulatory pathway for the approval/licensure of drugs for this disease or condition
- c. Proposed animal model – This should be a brief summary of the proposed animal model. Include the following information if available:
- i. Characteristics of the animal including but not limited to genus/species/strain, sex, age, and weight
 - ii. Characterization of the challenge agent
 - iii. Method/route of exposure
 - iv. Characteristics of the disease or condition (e.g., time course, signs, gross and microscopic lesions)
 - v. Primary and secondary endpoints
 - vi. Proposed types of data to be collected (e.g., observational, clinical chemistry, hematology, pathology)
- d. Comparability of the key features of the human disease or condition and the proposed animal model – Include discussion of similarities and differences. This information is best presented in a table.

4. Proposed Context of Use (COU)

The information provided in the proposed COU should reflect current scientific understanding. Depending on the degree of model development the amount of data available at the time of the LOI submission may limit your ability to provide all the details requested in the proposed COU. The COU should specify how the animal model is to be used in drug development under the Animal Rule, and should include details necessary to replicate the model, and should provide measures of quality control and assurance. The development of the COU is an iterative process between the QRT and the submitter as the model is refined.