

Statement of Work

A. **BACKGROUND AND PROJECT OBJECTIVES**

The Division of Cancer Treatment and Diagnosis (DCTD), National Cancer Institute (NCI) develops cancer therapeutic agents under the Developmental Therapeutics Program (DTP). Part of the DTP services includes formulation and production of clinical dosage forms of the agents selected by DCTD for further development.

This contract is intended to provide the NCI with non-parenteral dosage forms including but not limited to oral and topical dosage forms to be used in the NCI-sponsored and/or investigator-initiated clinical trials in humans. The Contractor will be responsible for formulation studies, process optimization, manufacture of the clinical dosage forms, release testing, quality control and quality assurance. Pre-formulation data may be provided to the Contractor by the NCI but the Contractor may be requested to conduct pre-formulation studies. Data obtained from this contract may be used to support Investigational New Drug Applications (IND) submitted to the US Food and Drug Administration (FDA). Batch sizes will range from small batches (e.g. several 100 units of tablets or capsules) to large size batches (e.g. 20-50,000 tablets or capsules) for phase I/II studies.

B. **SCOPE AND TASK**

The Contractor shall furnish services, qualified personnel, material, and a complete, ongoing and fully operational facility including all necessary equipment for all aspects of the manufacture and analytical testing of the manufactured dosage forms. The dosage forms will include but not be limited to tablets, enteric-coated tablets, capsules, soft gelatin capsules, oral powders, oral solutions, gel, cream and ointment. The facility and equipment shall conform to current Good Manufacturing Practices (cGMP) set forth by the FDA. Some manufacturing activities could be sub-contracted if the contractor does not have manufacturing capability of the soft gelatin capsules and topical dosage forms.

The Contractor shall provide all materials used in the manufacturing, testing, packaging and labeling of the formulated drug products unless provided by the NCI. The active pharmaceutical ingredient (API) will in most cases be supplied by the NCI. In addition, the Contractor shall provide adequate analytical instrumentation and pharmaceutical equipment to perform complete quality control evaluation of the formulated drug products. Such equipment include the in-house capability to perform gas liquid chromatography, high performance liquid chromatography, ultraviolet and infrared spectroscopy, pH and moisture determination, dissolution testing, etc.

1. **Formulation Studies**

All new Task Orders may require pre-production evaluation such as preparation of formulation, adoption of stability-indicating assay or development of such assay, accelerated stability studies, process optimization and compatibility studies with excipients commonly used in the manufacture of oral and topical dosage forms.

Information on chemical purity, analytical methods and some preliminary solubility data of the API will be provided if available at the time of the new Task Orders. The NCI will supply the API in most cases and the Contractor shall be responsible for acquisition of other supplies for the preparation works including analytical reagents, excipients, containers/closures and labels.

2. Production of Oral and Topical Dosage Forms

The Contractor shall manufacture batches of drug products intended for the use in clinical trials. Validated Standard Operating Procedures (SOP) should be placed for all phases of production and compendial testing. In case of capsules or tablets, batch sizes will range from several hundred units to as many as 50,000. In case of topical dosage forms, the batch size may be in the range of 50-1,000 units. The Contractor shall provide excipients, container/closure systems and labels. The bulk drug substance will be supplied by the NCI unless the Contracting Officer's Representative (COR) directs the Contractor to procure it from an approved source. Each written Task Order will specify a dosage form, strength, batch size, and packaging size unless work is needed during the course of preparation of the formulation.

3. Special Dosage Forms

Production of certain dosage forms such as soft gelatin capsules and topical dosage forms may not be available at the Offeror's facility. In that case, the Contractor may utilize Sub-Contractors after approval by the Contracting Officer.

4. Quality Assurance

The Contractor shall perform quality control testing of all components used in the formulation as well as the finished products. The testing shall include an identity of the API. Other tests such as purity of the API may be required to assure conformance with the previously obtained independent analytical results. All applicable compendial and other pharmaceutical testing for other components used in the formulation shall be required. Attributes for in-process testing for each dosage form shall be developed during the pre-production work and be performed during the production of the final products.

Quality control evaluation of the finished drug products shall be required to assure conformance to the NCI specifications. In addition to the testing required for oral and topical dosage forms in the current United State Pharmacopoeia (USP), the testing for the specifications may consist of the following as determined by the COR:

Oral Dosage Forms

- 1) Identity
- 2) Assay and Impurities
- 3) Content Uniformity
- 4) Dissolution

Topical Dosage Forms

- 1) Identity
- 2) Assay and Impurities
- 3) Content Uniformity

Other tests may be assigned by the NCI when necessary. The Contractor shall be responsible for Quality Assurance of products manufactured by the Sub-Contractors and shall provide detailed plans for monitoring sub-contractor efforts.

5. **Packaging, Labeling, Storage and Shipment of Finished Products**

All finished products shall be labeled and packaged according to specifications supplied by the COR. Label preparation may be subcontracted, but labeling shall be performed on the contract site. Finished products shall be stored at the labeled storage condition until released to the NCI. All products shall be sent directly to the NCI's designated storage facility upon release and to arrive within two (2) days under appropriate storage conditions. In some instances, an emergency drop shipment of the products may be required directly to a clinical investigator or to the NCI storage Contractor.

C. **TRAVEL REQUIREMENTS**

It is not anticipated that travel will be necessary under this requirement.

D. **PERIOD OF PERFORMANCE**

It is anticipated that the award from this solicitation will be an IDIQ contract with cost plus fixed fee task orders. The duration of the contract will be five (5) years.