CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

212035Orig1s000

ADMINISTRATIVE and CORRESPONDENCE DOCUMENTS

Food and Drug Administration Silver Spring MD 20993

PIND 135926

MEETING PRELIMINARY COMMENTS

Accord Healthcare Inc. Attention: Sabita Nair, RAC, ASQ-CPGP Senior Director - Regulatory Affairs 1009 Slate Road, Suite 210-B Durham, NC 27703

Dear Ms. Nair:

Please refer to your Pre-Investigational New Drug Application (PIND) file for argatroban.

We also refer to your June, 27, 2017, correspondence, received June 27, 2017, requesting a meeting to discuss your plans to submit a 505(b)(2) application for Argatroban injection in 0.9% sodium chloride 50 mg/50 mL to reference product

Our preliminary responses to your meeting questions are enclosed.

You should provide me a hardcopy or electronic version of any materials (i.e., slides or handouts) to be presented and/or discussed at the meeting.

In accordance with 21 CFR 10.65(e) and FDA policy, you may not electronically record the discussion at this meeting. The official record of this meeting will be the FDA-generated minutes.

If you have any questions, call me at (301) 348-3004.

Sincerely,

{See appended electronic signature page}

Rosa Lee-Alonzo, PharmD Regulatory Project Manager Division of Hematology Products Office of Hematology and Oncology Products Center for Drug Evaluation and Research

ENCLOSURE:

Preliminary Meeting Comments



FOOD AND DRUG ADMINISTRATIONCENTER FOR DRUG EVALUATION AND RESEARCH

PRELIMINARY MEETING COMMENTS

Meeting Type: B

Meeting Category: Pre-IND/Pre-NDA

Meeting Date and Time: August 15, 2017; 1:00 PM – 2:00 PM EST

Meeting Location: Teleconference

Application Number: PIND 135926 **Product Name:** argatroban

Indication: Direct thrombin inhibitor indicated for prophylaxis or treatment of

thrombosis in adult patients with heparin induced

thrombocytopenia (HIT) and as an anticoagulant in adult patients

with or at risk for HIT undergoing percutaneous coronary

intervention (PCI)

Sponsor/Applicant Name: Accord Healthcare Inc.

FDA ATTENDEES (tentative)

Office of Hematology and Oncology Products (OHOP)

Tamy Kim, PharmD, ADRA

Jessica Boehmer, Regulatory Scientist

OHOP/Division of Hematology Products

Ann Farrell, MD, Director

Edvardas Kaminskas, MD, Deputy Director

Albert Deisseroth, MD, PhD, Supervisory Associate Division Director

Kathie Robie Suh, MD, PhD, Clinical Team Leader

George Shashaty, MD, Medical Officer

Rosa Lee-Alonzo, PharmD, Regulatory Project Manager

SPONSOR ATTENDEES

Accord Healthcare Inc.

Sabita Nair, RAC, ASQ-CPGP, Senior Director-Regulatory Affairs

Introduction:

This material consists of our preliminary responses to your questions and any additional comments in preparation for the discussion at the meeting scheduled for August 15, 2017; 1:00 PM – 2:00 PM EST, White Oak Building 22, Conference Room: 1421 between Sponsor and the Division of Hematology Products. We are sharing this material to promote a collaborative and successful discussion at the meeting. The meeting minutes will reflect agreements, important issues, and any action items discussed during the meeting and may not be identical to these preliminary comments following substantive discussion at the meeting. If you determine that discussion is needed for only some of the original questions, you have the option of reducing the agenda and/or changing the format of the meeting (e.g., from face to face to teleconference). Contact the Regulatory Project Manager (RPM) if there are any major changes to your development plan, the purpose of the meeting, or the questions based on our preliminary responses, as we may not be prepared to discuss or reach agreement on such changes at the meeting.

1.0 BACKGROUND

Accord Healthcare Inc. requested a Pre-IND/Pre-NDA meeting to discuss their plans to submit PIND 135926 argatroban injection in 0.9% sodium chloride 50 mg/50 mL under a 505(b)(2) application to reference product

same indications, dosage form, route of administration, and dosing regimen as the reference product. The concentration will be the same as well

(50 mg/50 mL

(b) (4) reference listed drug (RLD)).

2.0 DISCUSSION

2.1. General

<u>Question 1:</u> Does the Agency agree that the proposed product is eligible for submission under a 505(b)(2) application?

FDA Response to Question 1:

Your proposal to submit a 505(b)(2) application appears to be appropriate. See "505(b)(2) REGULATORY PATHWAY" comments below.

2.2. Quality

<u>Ouestion 2:</u> The applicant will propose a shelf life of 24 months at the time of submission and the application will be updated with additional stability data during the review cycle. Is this acceptable?

FDA Response to Question 2:

It is our expectation that the NDA will include at least twelve (12) months of long-term stability data and at least six (6) months of accelerated stability data for at least three primary batches manufactured with multiple lots of drug substance at the time of submission. The

expiration period will be granted based on the quantity and quality of the stability data provided in the submission. Review of any data submitted more than thirty days after the submission of the original application will be dependent on resources. We would like to remind you that as stated in *Guidance for Industry ICH Q1E Evaluation of Stability Data*, "where long-term data are not amenable to statistical analysis, the proposed shelf life can be up to one-and-a-half times as long as, but should not be more than 6 months beyond, the period covered by long-term data," if relevant supporting data is available.

The release and stability specifications provided in the new drug application should include a commitment to conduct sterility and endotoxin testing following compendial methods (USP <71> and USP <85>) or a suitable equivalent method.

<u>Question 3:</u> Are any in-vitro studies required to support the equivalency of the proposed product with the Reference Listed Drug?

FDA Response to Question 3:

Please refer to FDA's response to Question 6 below.

2.3. Nonclinical

Question 4: Since Accord intends to rely on the agency's finding of safety for the Reference Listed Drug [Argatroban injection (in 0.9% Sodium Chloride),

[b) (4)
and in light of the previously approved levels of the inactive ingredients contained in the proposed formulation, Accord believes that no additional toxicological studies would be required for the NDA. Does the Agency agree?

FDA Response to Question 4:

From what you have provided in your meeting package, we agree no additional toxicology studies would be required to support an NDA.

2.4. Clinical

Question 5: Since the active and inactive ingredients, concentration of active-inactive ingredients, route of administration, dosage form, proposed indications and dosing regimen for the proposed product are the same as for the Reference Listed Drug [Argatroban injection (in 0.9% Sodium Chloride), and in light of Accord's intention to rely on the agency's findings of safety and efficacy for RLD [Argatroban injection (in 0.9% Sodium Chloride), as a basis for its NDA submission, Accord believes that clinical studies should not be required for submission and approval of the NDA. Does the Agency agree?

FDA Response to Question 5:

If all of the conditions you report are correct from a chemistry and manufacturing perspective, and the identity of your product to the reference listed drug is demonstrable, it is likely that clinical data will not have to be submitted. This will be a review issue.

2.5. Clinical Pharmacology/Biopharmaceutics

<u>Question 6</u>: Will the proposed product be eligible for a waiver of the requirement to provide evidence of in-vivo bioavailability or bioequivalence? If not, what types of studies will be required for submission and approval of the NDA?

FDA Response to Question 6:

A biowaiver may be feasible for the proposed drug product. In the NDA, include a biowaiver request with the appropriate CFR citation and supporting justification. To establish a bridge to the Listed Drug, we recommend including in the justification a summary table of comparative in vitro data including Assay, pH, osmolality, specific gravity, and viscosity of the proposed and reference drug products. The acceptability of the biowaiver request will be determined at the time of NDA review when all the required data are available for evaluation.

2.6. Interchangeability

Question 7: Does the Agency agree with the criteria for an "A" rating listing in the table above?

FDA Response to Question 7:

The Office of Generic Drugs (OGD) has conveyed that 505(b)(2) products are not normally assigned a Therapeutic Equivalence (TE) Code. However, some 505(b)(2) products may be assigned a TE Code (e.g., *some* injectable products that receive a biowaiver). If you would like for your product to be considered for a TE Code in the Orange Book, submit a general correspondence to your NDA after full approval of your NDA. Your correspondence should provide detail of your request and justification. You should also email a courtesy copy of that request to the Orange Book general inbox at <a href="mailto:drugored-mailto:drugor

For further information on how these evaluations are made, refer to the Preface of the Orange Book, Section 1.2.:

http://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/UCM071436.pdf.

Question 8: Does the Agency agree that the proposed product would be eligible for an "A" rating based on the criteria defined in the table above?

FDA Response to Question 8:

Please refer to the response to Question 7.

Question 9: Does the Agency agree that the bioavailability/bioequivalence of the proposed product would be considered self-evident, based on the fact that the concentration of the active/inactive ingredients, the route of administration and dosage form are same as the Reference Listed Drug?

FDA Response to Question 9:

Refer to FDA's response to Question 6 above.

<u>Question 10</u>: If the Agency does not agree that the bioavailability/bioequivalence of the proposed product would be considered self-evident, what types of studies would be required to satisfy this criterion for purposes of enabling an "A" rating?

FDA Response to Question 10:

Refer to FDA's response to Questions 6 and 7 above.

2.7. Additional Comments

Microbiology

- 1. The NDA submission should include a detailed description of the drug product sterilization, depyrogenation processes and validation information to ensure that the product is sterile and free from pyrogens. For additional information, consult the Guidance for Industry for the Submission Documentation for Sterilization Process Validation in Applications for Human and Veterinary Drug Products (1994).
- 2. The NDA submission should include a description of the drug product container closure integrity tests conducted to ensure product sterility throughout shelf life. The containers and closures used for integrity testing should be exposed to the same processes as those used in routine commercial manufacturing processes. The test should also include (b) (4) for a robust challenge of all container seals

3.0 OTHER IMPORTANT MEETING INFORMATION

PREA REQUIREMENTS

Under the Pediatric Research Equity Act (PREA) (21 U.S.C. 355c), all applications for new active ingredients (which includes new salts and new fixed combinations), new indications, new dosage forms, new dosing regimens, or new routes of administration are required to contain an assessment of the safety and effectiveness of the product for the claimed indication(s) in pediatric patients unless this requirement is waived, deferred, or inapplicable.

Because none of the criteria apply at this time to your application, you are exempt from these requirements. Please include a statement that confirms this finding, along with a reference to this communication, as part of the pediatric section (1.9 for eCTD submissions) of your application. If there are any changes to your development plans that would cause your application to trigger PREA, your exempt status would change.

PRESCRIBING INFORMATION

In your application, you must submit proposed prescribing information (PI) that conforms to the content and format regulations found at 21 <u>CFR 201.56(a) and (d)</u> and <u>201.57</u> including the Pregnancy and Lactation Labeling Rule (PLLR) (for applications submitted on or after June 30, 2015). As you develop your proposed PI, we encourage you to review the labeling review

resources on the <u>PLR Requirements for Prescribing Information</u> and <u>Pregnancy and Lactation</u> <u>Labeling Final Rule</u> websites, which include:

- The Final Rule (Physician Labeling Rule) on the content and format of the PI for human drug and biological products.
- The Final Rule (Pregnancy and Lactation Labeling Rule) on the content and format of information related to pregnancy, lactation, and females and males of reproductive potential.
- Regulations and related guidance documents.
- A sample tool illustrating the format for Highlights and Contents, and
- The Selected Requirements for Prescribing Information (SRPI) a checklist of important format items from labeling regulations and guidances.
- FDA's established pharmacologic class (EPC) text phrases for inclusion in the Highlights Indications and Usage heading.

The application should include a review and summary of the available published literature regarding drug use in pregnant and lactating women, a review and summary of reports from your pharmacovigilance database, and an interim or final report of an ongoing or closed pregnancy registry (if applicable), which should be located in Module 1. Refer to the draft guidance for industry – *Pregnancy, Lactation, and Reproductive Potential: Labeling for Human Prescription Drug and Biological Products* – *Content and Format* (http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM425398.pdf).

Prior to submission of your proposed PI, use the SRPI checklist to ensure conformance with the format items in regulations and guidances.

DATA STANDARDS FOR STUDIES

Under section 745A(a) of the FD&C Act, electronic submissions "shall be submitted in such electronic format as specified by [FDA]." FDA has determined that study data contained in electronic submissions (i.e., NDAs, BLAs, ANDAs and INDs) must be in a format that the Agency can process, review, and archive. Currently, the Agency can process, review, and archive electronic submissions of clinical and nonclinical study data that use the standards specified in the Data Standards Catalog (Catalog) (See http://www.fda.gov/forindustry/datastandards/studydatastandards/default.htm).

On December 17, 2014, FDA issued final guidance, *Providing Electronic Submissions in Electronic Format--- Standardized Study Data* (http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM292334.pdf). This guidance describes the submission types, the standardized study data requirements, and when standardized study data will be required. Further, it describes the availability of implementation support in the form of a technical specifications document, Study Data Technical Conformance Guide (Conformance Guide) (See http://www.fda.gov/downloads/ForIndustry/DataStandards/StudyDataStandards/UCM384744.pd

f), as well as email access to the eData Team (cder-edata@fda.hhs.gov) for specific questions related to study data standards. Standardized study data will be required in marketing application submissions for clinical and nonclinical studies that start on or after December 17, 2016. Standardized study data will be required in commercial IND application submissions for clinical and nonclinical studies that start on or after December 17, 2017. CDER has produced a <u>Study Data Standards Resources</u> web page that provides specifications for sponsors regarding implementation and submission of clinical and nonclinical study data in a standardized format. This web page will be updated regularly to reflect CDER's growing experience in order to meet the needs of its reviewers.

Although the submission of study data in conformance to the standards listed in the FDA Data Standards Catalog will not be required in studies that start before December 17, 2016, CDER strongly encourages IND sponsors to use the FDA supported data standards for the submission of IND applications and marketing applications. The implementation of data standards should occur as early as possible in the product development lifecycle, so that data standards are accounted for in the design, conduct, and analysis of clinical and nonclinical studies. For clinical and nonclinical studies, IND sponsors should include a plan (e.g., in the IND) describing the submission of standardized study data to FDA. This study data standardization plan (see the Conformance Guide) will assist FDA in identifying potential data standardization issues early in the development program.

Additional information can be found at http://www.fda.gov/Drugs/DevelopmentApprovalProcess/FormsSu

 $\frac{http://www.fda.gov/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequirements/ElectronicSubmissions/ucm248635.htm.}{}$

For general toxicology, supporting nonclinical toxicokinetic, and carcinogenicity studies, CDER encourages sponsors to use Standards for the Exchange of Nonclinical Data (SEND) and submit sample or test data sets before implementation becomes required. CDER will provide feedback to sponsors on the suitability of these test data sets. Information about submitting a test submission can be found here:

http://www.fda.gov/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequirements/ElectronicSubmissions/ucm174459.htm.

LABORATORY TEST UNITS FOR CLINICAL TRIALS

CDER strongly encourages IND sponsors to identify the laboratory test units that will be reported in clinical trials that support applications for investigational new drugs and product registration. Although Système International (SI) units may be the standard reporting mechanism globally, dual reporting of a reasonable subset of laboratory tests in U.S. conventional units and SI units might be necessary to minimize conversion needs during review. Identification of units to be used for laboratory tests in clinical trials and solicitation of input from the review divisions should occur as early as possible in the development process. For more information, please see the FDA website entitled, Study Data Standards Resources and the CDER/CBER Position on Use of SI Units for Lab Tests website found at http://www.fda.gov/ForIndustry/DataStandards/StudyDataStandards/ucm372553.htm.

MANUFACTURING FACILITIES

To facilitate our inspectional process, we request that you clearly identify *in a single location*, either on the Form FDA 356h, or an attachment to the form, all manufacturing facilities associated with your application. Include the full corporate name of the facility and address where the manufacturing function is performed, with the FEI number, and specific manufacturing responsibilities for each facility.

Also provide the name and title of an onsite contact person, including their phone number, fax number, and email address. Provide a brief description of the manufacturing operation conducted at each facility, including the type of testing and DMF number (if applicable). Each facility should be ready for GMP inspection at the time of submission.

Consider using a table similar to the one below as an attachment to Form FDA 356h. Indicate under Establishment Information on page 1 of Form FDA 356h that the information is provided in the attachment titled, "Product name, NDA/BLA 012345, Establishment Information for Form 356h."

Site Name	Site Address	Federal Establishment Indicator (FEI) or Registration Number (CFN)	Drug Master File Number (if applicable)	Manufacturing Step(s) or Type of Testing [Establishment function]
1.				
2.				

Corresponding names and titles of onsite contact:

Site Name	Site Address	Onsite Contact (Person, Title)	Phone and Fax number	Email address
1.				
2.				

505(b)(2) REGULATORY PATHWAY

The Division recommends that sponsors considering the submission of an application through the 505(b)(2) pathway consult the Agency's regulations at 21 CFR 314.54, and the draft guidance for industry, *Applications Covered by Section 505(b)(2)* (October 1999), available at http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm. In addition, FDA has explained the background and applicability of section 505(b)(2) in its October 14, 2003, response to a number of citizen petitions that had challenged the Agency's

interpretation of this statutory provision (see Docket FDA-2003-P-0274-0015, available at http://www.regulations.gov).

If you intend to submit a 505(b)(2) application that relies for approval on FDA's finding of safety and/or effectiveness for one or more listed drugs, you must establish that such reliance is scientifically appropriate, and must submit data necessary to support any aspects of the proposed drug product that represent modifications to the listed drug(s). You should establish a "bridge" (e.g., via comparative bioavailability data) between your proposed drug product and each listed drug upon which you propose to rely to demonstrate that such reliance is scientifically justified.

If you intend to rely on literature or other studies for which you have no right of reference but that are necessary for approval, you also must establish that reliance on the studies described in the literature or on the other studies is scientifically appropriate. You should include a copy of such published literature in the 505(b)(2) application and identify any listed drug(s) described in the published literature (e.g., by trade name(s)).

If you intend to rely on the Agency's finding of safety and/or effectiveness for a listed drug(s) or published literature describing a listed drug(s) (which is considered to be reliance on FDA's finding of safety and/or effectiveness for the listed drug(s)), you should identify the listed drug(s) in accordance with the Agency's regulations at 21 CFR 314.54. It should be noted that 21 CFR 314.54 requires identification of the "listed drug for which FDA has made a finding of safety and effectiveness," and thus an applicant may only rely upon a listed drug that was approved in an NDA under section 505(c) of the FD&C Act. The regulatory requirements for a 505(b)(2) application (including, but not limited to, an appropriate patent certification or statement) apply to each listed drug upon which a sponsor relies.

If FDA has approved one or more pharmaceutically equivalent products in one or more NDA(s) before the date of submission of the original 505(b)(2) application, you must identify one such pharmaceutically equivalent product as a listed drug (or an additional listed drug) relied upon (see 21 CFR 314.50(i)(1)(i)(C), 314.54, and 314.125(b)(19); see also 21 CFR 314.101(d)(9)). If you identify a listed drug solely to comply with this regulatory requirement, you must provide an appropriate patent certification or statement for any patents that are listed in the Orange Book for the pharmaceutically equivalent product, but you are not required to establish a "bridge" to justify the scientific appropriateness of reliance on the pharmaceutically equivalent product if it is scientifically unnecessary to support approval.

If you propose to rely on FDA's finding of safety and/or effectiveness for a listed drug that has been discontinued from marketing, the acceptability of this approach will be contingent on FDA's consideration of whether the drug was discontinued for reasons of safety or effectiveness.

We encourage you to identify each section of your proposed 505(b)(2) application that is supported by reliance on FDA's finding of safety and/or effectiveness for a listed drug(s) or on published literature (see table below). In your 505(b)(2) application, we encourage you to clearly identify (for each section of the application, including the labeling): (1) the information for the proposed drug product that is provided by reliance on FDA's finding of safety and/or effectiveness for the listed drug or by reliance on published literature; (2) the "bridge" that

supports the scientific appropriateness of such reliance; and (3) the specific name (e.g., proprietary name) of each listed drug named in any published literature on which your marketing application relies for approval. If you are proposing to rely on published literature, include copies of the article(s) in your submission.

In addition to identifying the source of supporting information in your annotated labeling, we encourage you to include in your marketing application a summary of the information that supports the application in a table similar to the one below.

List the information essential to the approval of the proposed drug that is provided by reliance on the FDA's previous finding of safety and effectiveness for a listed drug or by reliance on published literature				
Source of information (e.g., published literature, name of listed drug)	Information Provided (e.g., specific sections of the 505(b)(2) application or labeling)			
1. Example: Published literature	Nonclinical toxicology			
2. Example: NDA XXXXXX "TRADENAME"	Previous finding of effectiveness for indication A			
3. Example: NDA YYYYYY "TRADENAME"	Previous finding of safety for Carcinogenicity, labeling section B			
4.				

Please be advised that circumstances could change that would render a 505(b)(2) application for this product no longer appropriate. For example, if a pharmaceutically equivalent product were approved before your application is submitted, such that your proposed product would be a "duplicate" of a listed drug and eligible for approval under section 505(j) of the FD&C Act, then it is FDA's policy to refuse to file your application as a 505(b)(2) application (21 CFR 314.101(d)(9)). In such a case, the appropriate submission would be an Abbreviated New Drug Application (ANDA) that cites the duplicate product as the reference listed drug.

OFFICE OF SCIENTIFIC INVESTIGATIONS (OSI) REQUESTS

The Office of Scientific Investigations (OSI) requests that the following items be provided to facilitate development of clinical investigator and sponsor/monitor/CRO inspection assignments, and the background packages that are sent with those assignments to the FDA field investigators who conduct those inspections (Item I and II). This information is requested for all major trials used to support safety and efficacy in the application (i.e., phase 2/3 pivotal trials). Please note that if the requested items are provided elsewhere in submission in the format described, the Applicant can describe location or provide a link to the requested information.

The dataset that is requested in Item III below is for use in a clinical site selection model that is being piloted in CDER. Electronic submission of the site level dataset is voluntary and is intended to facilitate the timely selection of appropriate clinical sites for FDA inspection as part of the application and/or supplement review process.

This request also provides instructions for where OSI requested items should be placed within an eCTD submission (Attachment 1, Technical Instructions: Submitting Bioresearch Monitoring (BIMO) Clinical Data in eCTD Format).

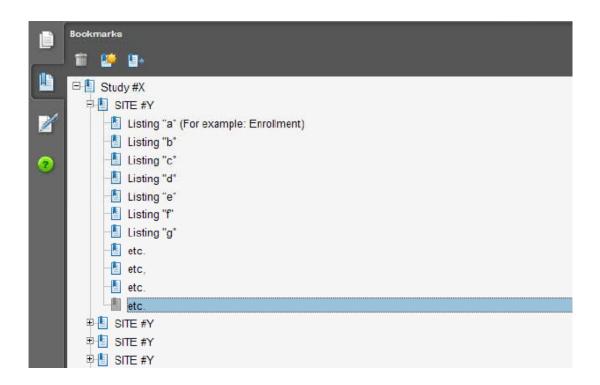
- I. Request for general study related information and comprehensive clinical investigator information (if items are provided elsewhere in submission, describe location or provide link to requested information).
 - 1. Please include the following information in a tabular format in the original NDA for each of the completed pivotal clinical trials:
 - a. Site number
 - b. Principal investigator
 - c. Site Location: Address (e.g., Street, City, State, Country) and contact information (i.e., phone, fax, email)
 - d. Location of Principal Investigator: Address (e.g., Street, City, State, and Country) and contact information (i.e., phone, fax, email). If the Applicant is aware of changes to a clinical investigator's site address or contact information since the time of the clinical investigator's participation in the study, we request that this updated information also be provided.
 - 2. Please include the following information in a tabular format, *by site*, in the original NDA for each of the completed pivotal clinical trials:
 - a. Number of subjects screened at each site
 - b. Number of subjects randomized at each site
 - c. Number of subjects treated who prematurely discontinued for each site by site
 - 3. Please include the following information in a tabular format in the NDA for each of the completed pivotal clinical trials:
 - a. Location at which sponsor trial documentation is maintained (e.g.,, monitoring plans and reports, training records, data management plans, drug accountability records, IND safety reports, or other sponsor records as described ICH E6, Section 8). This is the actual physical site(s) where documents are maintained and would be available for inspection
 - b. Name, address and contact information of all Contract Research Organization (CROs) used in the conduct of the clinical trials and brief statement of trial related functions transferred to them. If this information has been submitted in eCTD format previously (e.g., as an addendum to a Form FDA 1571, you may identify the location(s) and/or provide link(s) to information previously provided.
 - c. The location at which trial documentation and records generated by the CROs with respect to their roles and responsibilities in conduct of respective studies is

maintained. As above, this is the actual physical site where documents would be available for inspection.

- 4. For each pivotal trial, provide a sample annotated Case Report Form (or identify the location and/or provide a link if provided elsewhere in the submission).
- 5. For each pivotal trial, provide original protocol and all amendments (or identify the location and/or provide a link if provided elsewhere in the submission).

II. Request for Subject Level Data Listings by Site

- 1. For each pivotal trial: Site-specific individual subject data listings (hereafter referred to as "line listings"). For each site, provide line listings for:
 - a. Listing for each subject consented/enrolled; for subjects who were not randomized to treatment and/or treated with study therapy, include reason not randomized and/or treated
 - b. Subject listing for treatment assignment (randomization)
 - c. Listing of subjects that discontinued from study treatment and subjects that discontinued from the study completely (i.e., withdrew consent) with date and reason discontinued
 - d. Listing of per protocol subjects/ non-per protocol subjects and reason not per protocol
 - e. By subject listing of eligibility determination (i.e., inclusion and exclusion criteria)
 - f. By subject listing of AEs, SAEs, deaths and dates
 - g. By subject listing of protocol violations and/or deviations reported in the NDA, including a description of the deviation/violation
 - h. By subject listing of the primary and secondary endpoint efficacy parameters or events. For derived or calculated endpoints, provide the raw data listings used to generate the derived/calculated endpoint.
 - i. By subject listing of concomitant medications (as appropriate to the pivotal clinical trials)
 - j. By subject listing, of testing (e.g., laboratory, ECG) performed for safety monitoring
- 2. We request that one PDF file be created for each pivotal Phase 2 and Phase 3 study using the following format:



III. Request for Site Level Dataset:

OSI is piloting a risk based model for site selection. Voluntary electronic submission of site level datasets is intended to facilitate the timely selection of appropriate clinical sites for FDA inspection as part of the application and/or supplement review process. If you wish to voluntarily provide a dataset, please refer to the draft Guidance for Industry *Providing Submissions in Electronic Format – Summary Level Clinical Site Data for CDER's Inspection Planning* (available at the following link

http://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequire ments/UCM332468.pdf) for the structure and format of this data set.

Attachment 1

Technical Instructions: Submitting Bioresearch Monitoring (BIMO) Clinical Data in eCTD Format

A. Data submitted for OSI review belongs in Module 5 of the eCTD. For items I and II in the chart below, the files should be linked into the Study Tagging File (STF) for each study. Leaf titles for this data should be named "BIMO [list study ID, followed by brief description of file being submitted]." In addition, a BIMO STF should be constructed and placed in Module 5.3.5.4, Other Study reports and related information. The study ID for this STF should be "bimo." Files for items I, II and III below should be linked into this BIMO STF, using file tags indicated below. The item III site-level dataset filename should be "clinsite.xpt."

DSI Pre- NDA Request Item ¹	STF File Tag	Used For	Allowable File Formats
I	data-listing-dataset	Data listings, by study	.pdf
I	annotated-crf	Sample annotated case report form, by study	.pdf
II	data-listing-dataset	Data listings, by study (Line listings, by site)	.pdf
III	data-listing-dataset	Site-level datasets, across studies	.xpt
III	data-listing-data-definition	Define file	.pdf

B. In addition, within the directory structure, the item III site-level dataset should be placed in the M5 folder as follows:



C. It is recommended, but not required, that a Reviewer's Guide in PDF format be included. If this Guide is included, it should be included in the BIMO STF. The leaf title should be "BIMO Reviewer Guide." The guide should contain a description of the BIMO elements being submitted with hyperlinks to those elements in Module 5.

¹ Please see the OSI Pre-NDA/BLA Request document for a full description of requested data files

References:

eCTD Backbone Specification for Study Tagging Files v. 2.6.1 (http://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequire ments/ElectronicSubmissions/UCM163560.pdf)

FDA eCTD web page

(http://www.fda.gov/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequirements/Elect ronicSubmissions/ucm153574.htm)

For general help with eCTD submissions: ESUB@fda.hhs.gov

PATIENT-FOCUSED ENDPOINTS

An important component of patient-focused drug development is describing the patient's perspective of treatment benefit in labeling based on data from patient-focused outcome measures [e.g., patient-reported outcome (PRO) measures]. Therefore, early in product development, we encourage sponsors to consider incorporating well-defined and reliable patient-focused outcome measures as key efficacy endpoints in clinical trials, when appropriate, and to discuss those measures with the Agency in advance of confirmatory trials. For additional information, refer to FDA's guidance for industry *Patient-Reported Outcome Measures: Use in Medical Product Development to Support Claims*, available at http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM193282.pdf.

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.	
/s/	
ROSA J LEE-ALONZO 08/11/2017	