

FDA Webinar

Draft Guidance for Industry

Chronic Fatigue Syndrome/Myalgic Encephalomyelitis: Developing Drug Products for Treatment

April 23, 2014

Janet Maynard, MD, MHS

Clinical Team Leader

Division of Pulmonary, Allergy, and Rheumatology Products (DPARP)

Center for Drug Evaluation and Research (CDER)

Guidance for Industry

Chronic Fatigue Syndrome/ Myalgic Encephalomyelitis: Developing Drug Products for Treatment

DRAFT GUIDANCE

This guidance document is being distributed for comment purposes only.

Comments and suggestions regarding this draft document should be submitted within 60 days of publication in the *Federal Register* of the notice announcing the availability of the draft guidance. Submit electronic comments to <http://www.regulations.gov>. Submit written comments to the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. All comments should be identified with the docket number listed in the notice of availability that publishes in the *Federal Register*.

For questions regarding this draft document contact Dr. Janet W. Maynard at 301-796-2300.

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)

March 2014
Clinical/Medical

- Published – March 10, 2014
- Comments due – May 12, 2014
- www.Regulations.gov

<http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM388568.pdf>

Outline

- Background
 - FDA guidance development
 - Recent FDA activities regarding CFS/ME
- Important aspects of CFS/ME drug development
 - Unmet medical need
 - Drug development population
 - Efficacy considerations
 - Safety considerations
- Summary

Background: What is a Guidance?

- FDA's current thinking on a particular subject
 - Context of drug development
 - Intended to assist the pharmaceutical industry in the development of drug products for the treatment of a specific disease or type of disease
 - Establishes expectations for drug approval
- Not a roadmap
 - Development programs have unique considerations

Background: CFS/ME Guidance

- Serious disease or set of diseases
- Currently no FDA-approved therapies
 - FDA shares in the commitment to facilitate the development of safe and effective drug therapies for CFS and ME
 - A guidance may help catalyze drug development
- **Select recent FDA CFS/ME related activities**
 - FDA Workshop on Drug Development for CFS and ME (April 25-26, 2013)
 - Draft Guidance for Industry (March 2014)

CFS and ME Workshop Overview

April 25-26, 2013

- Two-day workshop and public meeting
- **Day 1**
 - Part of the FDA's Patient-Focused Drug Development (PFDD) initiative
 - Opportunity to hear directly from patients
 - Focused on PFDD topics:
 - Disease symptoms and impacts that matter most to patients
 - Patient's perspectives on current approaches to treatment
- **Day 2**
 - More technical discussion with regulatory, industry, clinical, and scientific experts on issues related to drug development

CFS and ME Workshop Outcomes

April 25-26, 2013

- **Workshop Day 1 Summary**

- The Voice of the Patient Report: Chronic Fatigue Syndrome and Myalgic Encephalomyelitis
- <http://www.fda.gov/downloads/ForIndustry/UserFees/PrescriptionDrugUserFee/UCM368806.pdf>

- **Workshop Day 2 Summary**

- <http://www.fda.gov/Drugs/NewsEvents/ucm386705.htm>

- **Draft Guidance for Industry—CFS/ME: Developing Drug Products for Treatment**

CFS/ME Symptoms

- Fatigue or exhaustion
- Unrefreshing sleep
- Weakness
- Muscle and joint pain
- Impaired memory or mental concentration
- Tender lymph nodes
- Sore throat
- Headaches
- Sleep dysfunction
- **Cognitive impairment**
- **Post-exertional malaise**
 - Acute exacerbation of symptoms

The Voice of the Patient, A Series of Reports From the U.S. Food and Drug Administration's (FDA's) Patient-Focused Drug Development Initiative, Chronic Fatigue Syndrome and Myalgic Encephalomyelitis (<http://www.fda.gov/downloads/ForIndustry/UserFees/PrescriptionDrugUserFee/UCM368806.pdf>).

Outline

- Background
 - FDA guidance development
 - Recent FDA activities regarding CFS/ME
- **Important aspects of CFS/ME drug development**
 - Unmet medical need
 - Drug development population
 - Efficacy considerations
 - Safety considerations
- Summary

Unmet Medical Need

- Serious disease, no approved therapies
- FDA offers expedited programs for serious conditions:
 - Fast tract designation
 - Breakthrough therapy designation
 - Accelerated approval
 - Priority review
- Draft Guidance for Industry: Expedited Programs for Serious Conditions—Drugs and Biologics
 - <http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM358301.pdf>

Drug Development Population

- Different diagnostic criteria are in use
- Recommendations for Sponsors
 - Propose case definition or criteria to define the drug development population
 - Provide justification for the chosen definition
 - Consider whether the targeted patient population reflects the general CFS/ME population or a subset

Efficacy Considerations

- Substantial evidence of efficacy in the enrolled patient population
- Efficacy endpoints: reflect the claimed clinical benefit related to how a patient feels or functions
- Demonstrate an acceptable risk-benefit profile

Trial Design and Duration

- Trial Design
 - 24-week, placebo-controlled, double-blinded, and randomized
 - Longer duration may be needed to assess some domains
- Concomitant Treatments
 - May be continued, but considered in the analysis
- Number of Trials
 - Generally, two definitive trials

Potential Efficacy Endpoints

- **Symptoms**
 - Such as fatigue or other symptoms of CFS/ME
- **Other Domains**
 - Exercise capacity and post-exertional malaise
 - Health-related quality of life (HRQL)

Patient reported outcomes (PROs)

- FDA will consider the use of symptom assessments that have been developed and evaluated in other conditions or novel instruments
 - Endpoint and PRO selection should be discussed with the division early in drug development

Safety Considerations

- In general, treatment will be prolonged
 - Sponsors should collect long-term safety data
 - Discuss plans for safety monitoring with the FDA

Outline

- Background
 - FDA guidance development
 - Recent FDA activities regarding CFS/ME
- Important aspects of CFS/ME drug development
 - Unmet medical need
 - Drug development population
 - Efficacy considerations
 - Safety considerations
- Summary

Drug Development in CFS/ME

- Drug development requires multiple partners
- FDA's role: advise on the regulatory standards for product approval
 - Draft Guidance on Drug Development for CFS/ME articulates the expectations for drug approval
 - Federal Register Notice → notification of partners
- Comment submission
- Next steps
 - Comment review

Summary

- CFS/ME is a serious disease without approved therapies
 - This guidance is intended to assist in the development of drug products for CFS/ME
 - Drug development should focus on establishing efficacy and safety in a well defined patient population
 - Endpoints should reflect the claimed clinical benefit related to how a patient feels or functions
 - FDA recognizes the unmet need for patients with CFS/ME and is supportive of drug development and collaboration with interested parties

Relevant Links

- April 25 and 26 Workshop: Drug Development for CFS and ME
 - <http://www.fda.gov/Drugs/NewsEvents/ucm369563.htm>
- CFS and ME Voice of the Patient Report
 - <http://www.fda.gov/downloads/ForIndustry/UserFees/PrescriptionDrugUserFee/UCM368806.pdf>
- Background on FDA Patient-Focused Drug Development and Benefit-Risk Assessment
 - <http://www.fda.gov/ForIndustry/UserFees/PrescriptionDrugUserFee/ucm326192.htm>



Questions