

**CENTER FOR DRUG EVALUATION AND RESEARCH**

**Approval Package for:**

***APPLICATION NUMBER:***

**203923Orig1s000**

***Trade Name:*** Sodium thiosulfate injection, 250 mg/mL.

***Generic Name:*** Sodium thiosulfate.

***Sponsor:*** Hope Pharmaceuticals

***Approval Date:*** February 14, 2012

***Indications:*** Use of sodium thiosulfate injection for sequential use with sodium nitrite for the treatment of acute cyanide poisoning that is judged to be lifethreatening.

# CENTER FOR DRUG EVALUATION AND RESEARCH

**203923Orig1s000**

## CONTENTS

|                                                           |
|-----------------------------------------------------------|
| <b>Reviews / Information Included in this NDA Review.</b> |
|-----------------------------------------------------------|

|                                                         |          |
|---------------------------------------------------------|----------|
| <b>Approval Letter</b>                                  | <b>X</b> |
| <b>Other Action Letters</b>                             |          |
| <b>Labeling</b>                                         | <b>X</b> |
| <b>REMS</b>                                             |          |
| <b>Summary Review</b>                                   | <b>X</b> |
| <b>Officer/Employee List</b>                            | <b>X</b> |
| <b>Office Director Memo</b>                             |          |
| <b>Cross Discipline Team Leader Review</b>              | <b>X</b> |
| <b>Medical Review(s)</b>                                | <b>X</b> |
| <b>Chemistry Review(s)</b>                              | <b>X</b> |
| <b>Environmental Assessment</b>                         |          |
| <b>Pharmacology Review(s)</b>                           |          |
| <b>Statistical Review(s)</b>                            |          |
| <b>Microbiology Review(s)</b>                           |          |
| <b>Clinical Pharmacology/Biopharmaceutics Review(s)</b> |          |
| <b>Other Reviews</b>                                    | <b>X</b> |
| <b>Risk Assessment and Risk Mitigation Review(s)</b>    |          |
| <b>Proprietary Name Review(s)</b>                       |          |
| <b>Administrative/Correspondence Document(s)</b>        | <b>X</b> |

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

***APPLICATION NUMBER:***

**203923Orig1s000**

**APPROVAL LETTER**



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration  
Silver Spring MD 20993

NDA 203923

**NDA APPROVAL**

Hope Pharmaceuticals  
Suite 125  
16416 N. 92nd St.  
Scottsdale, AZ 85260

Attention: Craig R. Sherman, M.D.  
President

Dear Dr. Sherman:

Please refer to your New Drug Application (NDA) dated January 10, 2012, received January 10, 2012, submitted pursuant to section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act for sodium thiosulfate injection, 250 mg/mL.

We acknowledge receipt of your amendment dated January 26, 2012.

This new drug application provides for the use of sodium thiosulfate injection for sequential use with sodium nitrite for the treatment of acute cyanide poisoning that is judged to be life-threatening.

We have completed our review of this application, as amended. It is approved, effective on the date of this letter, for use as recommended in the enclosed agreed-upon labeling text.

**CONTENT OF LABELING**

As soon as possible, but no later than 14 days from the date of this letter, submit the content of labeling [21 CFR 314.50(l)] in structured product labeling (SPL) format using the FDA automated drug registration and listing system (eLIST), as described at <http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm>. Content of labeling must be identical to the enclosed labeling text for the package insert. Information on submitting SPL files using eLIST may be found in the guidance for industry titled "SPL Standard for Content of Labeling Technical Qs and As" at <http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM072392.pdf>.

The SPL will be accessible via publicly available labeling repositories.

## **CARTON AND IMMEDIATE CONTAINER LABELS**

Submit final printed carton and container labels that are identical to the enclosed carton and immediate container labels as soon as they are available, but no more than 30 days after they are printed. Please submit these labels electronically according to the guidance for industry titled “Providing Regulatory Submissions in Electronic Format – Human Pharmaceutical Product Applications and Related Submissions Using the eCTD Specifications (June 2008).”

Alternatively, you may submit 12 paper copies, with 6 of the copies individually mounted on heavy-weight paper or similar material. For administrative purposes, designate this submission “**Final Printed Carton and Container Labels for approved NDA 203923.**” Approval of this submission by FDA is not required before the labeling is used.

Marketing the product(s) with FPL that is not identical to the approved labeling text may render the product misbranded and an unapproved new drug.

## **PROPRIETARY NAME**

If you intend to have a proprietary name for this product, the name and its use in the labels must conform to the specifications under 21 CFR 201.10 and 201.15. We recommend that you submit a request for a proposed proprietary name review. (See the guidance for industry titled, “Contents of a Complete Submission for the Evaluation of Proprietary Names”, at <http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/ucm075068.pdf> and “PDUFA Reauthorization Performance Goals and Procedures Fiscal Years 2008 through 2012”.)

## **REQUIRED PEDIATRIC ASSESSMENTS**

Under the Pediatric Research Equity Act (PREA) (21 U.S.C. 355c), all applications for new active ingredients, 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 this drug product for this indication has an orphan drug designation, and none of these criteria apply to your application, you are exempt from this requirement.

## **POSTMARKETING COMMITMENTS NOT SUBJECT TO THE REPORTING REQUIREMENTS UNDER SECTION 506B**

We remind you of your postmarketing commitment:

|        |                                                                                                                                           |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1874-1 | Evaluate alternative container closure systems and (b) (4) sterilization methods that might result in a more acceptable leachable profile |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------|

The timetable you submitted on February 9, 2012, states that you will conduct this study according to the following schedule:

|                            |         |
|----------------------------|---------|
| Final Protocol Submission: | 04/2012 |
| Study Completion:          | 07/2012 |
| Final Report Submission:   | 08/2012 |

We recognize that the same postmarketing commitment was issued on January 14, 2011, for NDA 201444 Nithiodote (sodium nitrite and sodium thiosulfate) at the time of approval. We find it agreeable to use the same study to fulfill the postmarketing commitment for sodium thiosulfate.

If you plan to use the postmarketing commitment from NDA 201444 Nithiodote (sodium nitrite and sodium thiosulfate) to fulfill this PMC, please cross-reference any relevant submissions to this NDA. Submit nonclinical and chemistry, manufacturing, and controls protocols and all study final reports to this NDA. In addition, under 21 CFR 314.81(b)(2)(vii) and 314.81(b)(2)(viii) you should include a status summary of each commitment in your annual report to this NDA. The status summary should include expected summary completion and final report submission dates, any changes in plans since the last annual report, and, for clinical studies/trials, number of patients entered into each study/trial. All submissions, including supplements, relating to these postmarketing commitments should be prominently labeled **“Postmarketing Commitment Protocol,” “Postmarketing Commitment Final Report,”** or **“Postmarketing Commitment Correspondence.”**

## **PROMOTIONAL MATERIALS**

You may request advisory comments on proposed introductory advertising and promotional labeling. To do so, submit, in triplicate, a cover letter requesting advisory comments, the proposed materials in draft or mock-up form with annotated references, and the package insert to:

Food and Drug Administration  
Center for Drug Evaluation and Research  
Office of Prescription Drug Promotion  
5901-B Ammendale Road  
Beltsville, MD 20705-1266

As required under 21 CFR 314.81(b)(3)(i), you must submit final promotional materials, and the package insert, at the time of initial dissemination or publication, accompanied by a Form FDA 2253. For instruction on completing the Form FDA 2253, see page 2 of the Form. For more information about submission of promotional materials to the Office of Prescription Drug Promotion (OPDP), see <http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm>.

### **EXPIRATION DATING PERIOD**

A 18 month expiration date is granted for sodium thiosulfate injection when stored at 20°C to 25°C (68°F to 77°F) with excursions permitted from 15°C to 30°C (59°F to 86°F).

### **REPORTING REQUIREMENTS**

We remind you that you must comply with reporting requirements for an approved NDA (21 CFR 314.80 and 314.81).

If you have any questions, call Matt Sullivan, Senior Regulatory Project Manager, at (301) 796-1245.

Sincerely,

*{See appended electronic signature page}*

Rigoberto Roca, M.D.  
Deputy Director  
Division of Anesthesia, Analgesia, and  
Addiction Products  
Office of Drug Evaluation II  
Center for Drug Evaluation and Research

### **ENCLOSURE(S):**

Content of Labeling  
Carton and Container Labeling

-----  
**This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.**  
-----

/s/  
-----

RIGOBERTO A ROCA  
02/14/2012