# CENTER FOR DRUG EVALUATION AND RESEARCH

*APPLICATION NUMBER:*

**21-892**

## PROPRIETARY NAME REVIEW(S)

**CONSULTATION RESPONSE**
**DIVISION OF MEDICATION ERRORS AND TECHNICAL SUPPORT**
**OFFICE OF DRUG SAFETY**
**(DMETS; White Oak 22, Mail Stop 4447)**

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|---|---|---|
| **DATE RECEIVED:** January 5, 2006<br>**DATE OF DOCUMENT:** December 19, 2005 | **DESIRED COMPLETION DATE:** February 1, 2006<br>**PDUFA DATE:** March 17, 2006 | **ODS CONSULT #:** 05-0078-2 |

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HFD-180

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|---|---|
| **PRODUCT NAME:**<br><br>**Osmoprep**<br>(Sodium Phosphate Monobasic Monohydrate, USP, Sodium Phosphate Dibasic Anhydrous, USP)<br>Tablets<br>1.5 g<br><br>**NDA #:** 21-892 (IND 56,291) | **SPONSOR:** Salix Pharmaceuticals, Inc. |

**RECOMMENDATIONS:**

1. DMETS has no objections to the use of the proprietary name, Osmoprep. We consider this a final review. However, if the approval of the NDA is delayed beyond 90 days from the date of this review, the name with its associated labels and labeling must be re-evaluated. A re-review of the name before the NDA approval will rule out any objections based upon approvals of other proprietary/established names from this date forward.

2. DDMAC finds the proprietary name, Osmoprep, acceptable from a promotional perspective.

3. Revised container labels, carton and insert labeling were not provided for review and comment at this time. Refer to comments made in the previous review (ODS Consult #05-0078)

DMETS would appreciate feedback of the final outcome of this consult. We would be willing to meet with the Division for further discussion, if needed. If you have further questions or need clarifications, please contact Diane Smith, project manager, at 301-796-0538.

**Division of Medication Errors and Technical Support (DMETS)**
**Office of Drug Safety**
**White Oak 22, Mail Stop 4447**
**Center for Drug Evaluation and Research**

**PROPRIETARY NAME REVIEW**

**DATE OF REVIEW:** January 12, 2006

**NDA#:** 21-892 (IND 56,291)

**NAME OF DRUG:** **Osmoprep**
(Sodium Phosphate Monobasic Monohydrate, USP, Sodium Phosphate Dibasic Anhydrous) Tablets
1.5 g

**NDA HOLDER:** Salix Pharmaceuticals, Inc.

***NOTE: This review contains proprietary and confidential information that should not be released to the public.***

## I. INTRODUCTION:

This consult was written in response to a request from the Division of Gastroenterology Products (HFD-180), for assessment of the proprietary name, "Osmoprep", regarding potential name confusion with other proprietary or established drug names. The sponsor's previously submitted names, [redacted] and [redacted], were found unacceptable. Subsequently, the sponsor submitted [redacted] as their primary name, Osmoprep as the secondary name, and [redacted] as their tertiary name. Due to the significant look and sound-alike potential with the already U.S. marketed product, Chloraprep, the Division and DMETS concurred that [redacted] would not be reviewed further. Therefore, DMETS will review the proposed names Osmoprep and [redacted] (if needed). Revised container labels, carton and insert labeling were not provided for review and comment at this time. Please refer to comments made in the previous review (ODS Consult # 05-0078).

PRODUCT INFORMATION

Osmoprep (sodium phosphate monobasic monohydrate and sodium phosphate dibasic anhydrous) is a purgative used to clean the colon prior to colonoscopy. The primary mode of action is thought to be through the osmotic effect of sodium, causing large amounts of water to be drawn into the bowel, promoting bowel evacuation. Osmoprep tablets are indicated for cleansing the bowel as a preparation for colonoscopy, in adults 18 years of age or older. The usual adult dosage of Osmoprep tablets for colon cleansing is 32 tablets taken orally in the following manner: The evening before the colonoscopy procedure, take four Osmoprep tablets with 8 ounces of clear liquids every 15 minutes for a total of 20 tablets. On the day of the colonoscopy procedure, (starting 3 to 5 hours before the procedure) take 4 Osmoprep tablets with 8 ounces of clear liquids every 15 minutes for a total of 12 tablets. Osmoprep tablets will be supplied in bottles containing 100 tablets. Each tablet contains 1.102 g sodium phosphate

monobasic monohydrate, USP and 0.398 g sodium phosphate dibasic anhydrous, USP for a total of 1.5 g of sodium phosphate.

## I. RISK ASSESSMENT:

The medication error staff of DMETS conducted a search of several standard published drug product reference texts[1,2] as well as several FDA databases[3] for existing drug names which sound-alike or look alike to Osmoprep to a degree where potential confusion between drug names could occur under the usual clinical practice settings. A search of the electronic online version of the U.S. Patent and Trademark Office's Text and Image Database was also conducted[4]. The Saegis[5] Pharma-In-Use database was searched for drug names with potential for confusion. An expert panel discussion was conducted to review all findings from the searches. In addition, DMETS conducted three prescription analysis studies consisting of two written prescription studies (inpatient and outpatient) and one verbal prescription study, involving health care practitioners within FDA. This exercise was conducted to simulate the prescription ordering process in order to evaluate potential errors in handwriting and verbal communication of the name.

### A. EXPERT PANEL DISCUSSION (EPD)

An Expert Panel discussion was held by DMETS to gather professional opinions on the safety of the proprietary name, Osmoprep. Potential concerns regarding drug marketing and promotion related to the proposed names were also discussed. This group is composed of DMETS Medication Errors Prevention Staff and representation from the Division of Drug Marketing, Advertising, and Communications (DDMAC). The group relies on their clinical and other professional experiences and a number of standard references when making a decision on the acceptability of a proprietary name.

1. DDMAC finds the proprietary name, Osmoprep, acceptable from a promotional perspective.

2. The Expert Panel identified two proprietary names that were thought to have the potential for confusion with Osmoprep. These products are listed in Table 1 (see page 4), along with the dosage forms available and usual dosage.

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[1] MICROMEDEX Integrated Index, 2006, MICROMEDEX, Inc., 6200 South Syracuse Way, Suite 300, Englewood, Colorado 80111-4740, which includes all products/databases within ChemKnowledge, DrugKnowledge, and RegsKnowledge Systems.

[2] Facts and Comparisons, online version, Facts and Comparisons, St. Louis, MO.

[3] AMF Decision Support System [DSS], the Division of Medication Errors and Technical Support [DMETS] database of Proprietary name consultation requests, New Drug Approvals 98-06, and the electronic online version of the FDA Orange Book.

[4] WWW location http://www.uspto.gov/tmdb/index.html.

[5] Data provided by Thomson & Thomson's SAEGIS ™ Online Service, available at www.thomson-thomson.com

Table 1: Potential Sound-Alike/Look-Alike Names Identified by DMETS Expert Panel

| Product Name | Dosage form(s), Established name | Usual adult dose* | Other** |
|---|---|---|---|
| **Osmoprep** | **Sodium Phosphate Monobasic Monohydrate and Sodium Phosphate Dibasic Tablets 1.5 g** | **32 tablet regimen:**<br>**1) 4 tablets every 15 minutes with 8oz of clear liquid (20 tablets) the evening before colonoscopy.**<br>**2) 4 tablets every 15 minutes with 8 oz of clear liquid (12 tablets) 3-5 hours before colonoscopy.** | |
| Ocupress | Carteolol Hydrochloride Ophthalmic Solution, 1% | 1 drop in affected eye(s) twice daily. | L/A |
| Omnipred*** | Prednisolone Acetate Ophthalmic Suspension, 1% | 2 drops in affected eye(s) four times daily. | L/A |

*Frequently used, not all-inclusive.
**L/A (look-alike), S/A (sound-alike)
***Name pending approval. Not FOI releasable.

B. PHONETIC and ORTHOGRAPHIC COMPUTER ANALYSIS (POCA)

As part of the name similarity assessment, proposed names are evaluated via a phonetic/orthographic algorithm. The proposed proprietary name is converted into its phonemic representation before it runs through the phonetic algorithm. The phonetic search module returns a numeric score to the search engine based on the phonetic similarity to the input text. Likewise, an orthographic algorithm exists which operates in a similar fashion. All names considered to have significant phonetic or orthographic similarities to Osmoprep were discussed by the Expert Panel (EPD).

C. PRESCRIPTION ANALYSIS STUDIES

1. Methodology:

Three separate studies were conducted within the Centers of the FDA for the proposed proprietary name to determine the degree of confusion of Osmoprep with marketed U.S. drug names (proprietary and established) due to similarity in visual appearance with handwritten prescriptions or verbal pronunciation of the drug name. These studies employed a total of 121 health care professionals (pharmacists, physicians, and nurses). This exercise was conducted in an attempt to simulate the prescription ordering process. An inpatient order and outpatient prescriptions were written, each consisting of a combination of marketed and unapproved drug products and a prescription for Osmoprep (see page 5). These prescriptions were optically scanned and one prescription was delivered to a random sample of the participating health professionals via e-mail. In addition, the outpatient orders were recorded on voice mail. The voice mail messages were then sent to a random sample of the participating health professionals for their interpretations and review. After receiving either the written or verbal prescription orders, the participants sent their interpretations of the orders via e-mail to the medication error staff.

| HANDWRITTEN PRESCRIPTION | VERBAL PRESCRIPTION |
|---|---|
| Outpatient RX:<br>Osmoprep<br>#24<br>4 tabs q 15min, 3-5hrs before scope | Osmoprep<br>#24<br>4 tablets every 15 minutes, 3-5 hours before scope. |
| Inpatient RX:<br>Osmoprep 4 tabs q 15 min 3-5 hrs before scope | |

2. Results:

None of the interpretations of the proposed name overlap, sound similar, or look similar to any currently marketed U.S. product. See appendix A for the complete listing of interpretations from the verbal and written studies.

E. SAFETY EVALUATOR RISK ASSESSMENT

In reviewing the proprietary name, Osmoprep***, the primary concerns related to look-alike confusion with Ocupress and Omnipred***.

Additionally, DMETS conducted prescription studies to simulate the prescription ordering process. In this case, there was no confirmation that the proposed name could be confused with any of the aforementioned names. However, negative findings are not predicative as to what may occur once the drug is widely prescribed, as these studies have limitations primarily due to a small sample size. The majority of misinterpretations were misspelled/phonetic variations of the proposed name, Osmoprep.

1. Ocupress and Osmoprep were found to have look-alike similarities. Ocupress (carteolol hydrochloride) is a long-acting, nonselective, beta-adrenergic antagonist ophthalmic agent which is applied topically for the treatment of chronic open-angle glaucoma or ocular hypertension. Ocupress is topically administered with one drop to each affected eye twice daily and is available in an 1% strength. Ocupress and Osmoprep share similar looking prefixes, both beginning with an "O", and having the downstroke letter, "p", in a similar position (see page 6). Their endings ("-press" vs. "-prep") may look-alike especially if the second "p" in Osmoprep is not handwritten with a prominent downstroke. Despite some overlapping orthographic characteristics, Ocupress and Osmoprep vary with respect to their product characteristics. Ocupress and Osmoprep have different dosage forms (ophthalmic suspension vs. tablet), route of administration (ophthalmic vs. oral), dosage schedule (twice daily vs. every 15 minutes), and

*** Name pending approval. Not FOI releasable.

dosage strength (1% vs. 1.5 g). One could argue that if a prescription was written ambiguously as "Osmoprep – UAD", it could be mistaken for "Ocupress – UAD". Given that both products are available in only one strength, this argument seems plausible, however, Osmoprep will not be available in a unit-of-use package, thereby requiring the prescriber to specify the number of tablets to be taken. Therefore, DMETS believes the likelihood of confusion between Ocupress and Osmoprep to be minimal.

Ocupress
Osmoprep

2. Omnipred*** was found to look like Osmoprep. Omnipred*** is the proposed proprietary name for an adrenocortical steroid product prepared as a sterile ophthalmic suspension. It is indicated for use in steroid responsive inflammatory conditions of the palpebral and bulbar conjunctivita, cornea, and anterior segment of the globe such as allergic conjunctivitis, acne rosacea, superficial punctate keratitis, iritis, selected infective conjuctivitides, when the inherent hazard of steroid use is accepted to obtain an advisable diminution in edema and inflammation; corneal injury from chemical, radiation, or thermal burns, or penetration of foreign bodies. Omnipred*** is available as a 1% suspension. The usual dosage is two drops in each affected eye(s) four times daily.

The look-alike similarity stems from both Omnipred and Osmoprep are eight letters long and share similar looking prefixes ("Omni-" vs. "Osmo-") and suffixes ("-pred" vs. "-prep"). Some distinction can be made between the second "p" in Osmoprep and the "d" in Omnipred (see below). Omnipred and Osmoprep do not share a common route of administration (ophthalmic vs. oral), dosage form (ophthalmic suspension vs. tablet), dosage schedule (four times daily vs. every 15 minutes) or strength (1% vs. 1.5 g). Availability in only one strength allows the prescriber to order either medication without specifying the strength. However, Osmoprep, requires a specific quantity, which if omitted, would necessitate further clarification. Therefore, despite some overlapping look-alike characteristics, DMETS believes the likelihood for confusion to be minimal for the aforementioned reasons.

Osmoprep
Omnipred

*** Name pending approval. Not FOI releasable.

Appendix A – DMETS Prescription Study Results

| Voice | Inpatient | Outpatient |
|---|---|---|
| Osmoprep | Osmoprep | Osmoprep |
| Osmo Prep | Osmoprep | Osmoprep |
| Osmoprep | Osmoprep | Osmoprep |
| Osmoprep | Osmoprep | Osmoprep |
| Osmoprep | Osmoprep | Osmoprep |
| Ozmo Prep | Osmoprep | Osmoprep |
| Osmoprep | Osonoprep | Osmoprep |
| Osmo Prep | Osmoprep | Osmoprep |
| Osmoprep | Osmoprep | Osmoprep |
| Osmoprep | Osmoprep | Osmoprep |
| Osmoprep | Osmoprep | Osumoprop |
| Osmoprep | Osmoprep | Osmoprep |
| Ozmoprep | Osmoprep | Osmoprep |
| osmoprep | Osmoprep | Osmoprep |
| Osmoprep | Osmoprep | osmoprep |
| | Osmoprep | Osmoprep |
| | Osmoprep | Osmorsrep |
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