

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:
125553Orig1s000

PROPRIETARY NAME REVIEW(S)

PROPRIETARY NAME REVIEW

Division of Medication Error Prevention and Analysis (DMEPA)
Office of Medication Error Prevention and Risk Management (OMEPRM)
Office of Surveillance and Epidemiology (OSE)
Center for Drug Evaluation and Research (CDER)

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Date of This Review: July 23, 2014
Application Type and Number: BLA 125553
Product Name and Strength: Zarxio (“EP2006” *)
Injection
300 mcg/0.5 mL and 480 mcg/0.8 mL
Product Type: Single Ingredient
Rx or OTC: Rx
Applicant/Sponsor Name: Sandoz
Submission Date: May 21, 2014
Panorama #: 2014-17391
DMEPA Primary Reviewer: Neil Vora, PharmD, MBA
DMEPA Team Leader: Yelena Maslov, PharmD
DMEPA Associate Director: Lubna Merchant, PharmD, MS

* Zarxio has been developed as a proposed biosimilar to Neupogen® (filgrastim). Since the proper name for Zarxio has not yet been determined, “EP2006” is used throughout this review as the nonproprietary name for this product.

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1 INTRODUCTION

This review evaluates the proposed proprietary name, Zarxio, from a safety and promotional perspective. The sources and methods used to evaluate the proposed name are outlined in the reference section and Appendix A respectively. The Applicant did not submit an external name study for this proposed proprietary name.

1.1 REGULATORY HISTORY

Sandoz previously submitted the proposed proprietary name, (b) (4) to IND 109197 on January 20, 2012. However, the Division of Medication Error Prevention and Analysis (DMEPA) found the name, (b) (4) unacceptable (b) (4)

Subsequently, Sandoz submitted the name, Zarxio for review and was found acceptable (RCM 2013-420).

Currently, Sandoz has submitted the name, Zarxio for review in the BLA cycle.

1.2 PRODUCT INFORMATION

The following product information is provided in the May 21, 2014 proprietary name submission.

- Intended Pronunciation: Zar-Zee-Oh
- Active Ingredient: “EP2006”*
- Indication of Use:
 - Cancer patients receiving myelosuppressive chemotherapy
 - Patients with acute myeloid leukemia (AML) receiving induction or consolidation chemotherapy
 - Cancer patients receiving bone marrow transplant
 - Patients undergoing peripheral blood progenitor cell collection and therapy
 - Patients with severe chronic neutropenia
- Route of Administration: Subcutaneous (SC) injection and Intravenous (IV) injection.
- Dosage Form: Injection
- Strength: 300 mcg/0.5 mL of EP2006
480 mcg/0.8 mL of EP2006

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- Dose and Frequency: Dosing is dependent on indication. No dose adjustment for severe renal or hepatic impairment, children or elderly.
 - **Cancer patients receiving myelosuppressive chemotherapy**
 - 5 mcg/kg per day
 - **Patients with acute myeloid leukemia (AML) receiving induction or consolidation chemotherapy**
 - (b) (4) mcg/kg per day
 - **Cancer patients receiving bone marrow transplant**
 - 10 mcg/kg per day
 - **Patients undergoing peripheral blood progenitor cell collection and therapy**
 - 10 mcg/kg per day
 - **Patients with severe chronic neutropenia**
 - Congenital Neutropenia: 6 mcg/kg subcutaneously twice daily
 - Idiopathic or Cyclic Neutropenia: 5 mcg/kg as a single subcutaneous injection daily
- How Supplied: EP2006* a sterile, clear, colorless, preservative free liquid is used for parenteral administration. The product is available in single use prefilled syringes. The single use prefilled syringes contain either 300 mcg or 480 mcg EP2006* at a fill volume of 0.5 mL or 0.8 mL, respectively.
- Storage: 2° to 8°C (36° to 46°F). May be at room temperature for a maximum of 24 hours.

2 RESULTS

The following sections provide information obtained and considered in the overall evaluation of the proposed proprietary name.

2.1 PROMOTIONAL ASSESSMENT

The Office of Prescription Drug Promotion (OPDP) determined the proposed name is acceptable from a promotional perspective. DMEPA and the Division of Hematology Products (DHP) concurred with the findings of OPDP's promotional assessment of the proposed name.

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2.2 SAFETY ASSESSMENT

The following aspects were considered in the safety evaluation of the name.

2.2.1 United States Adopted Names (USAN) Search

There is no USAN stem present in the proprietary name¹.

2.2.2 Components of the Proposed Proprietary Name

The Applicant did not provide a derivation or intended meaning for the proposed name, EP2006 in their submission. This proprietary name is comprised of a single word that does not contain any components (i.e. a modifier, route of administration, dosage form, etc.) that are misleading or can contribute to medication error.

2.2.3 FDA Name Simulation Studies

Ninety five practitioners participated in DMEPA's prescription studies. The interpretations did not overlap with any currently marketed products nor did the misinterpretations sound or look similar to any currently marketed products or any products in the pipeline. In the written outpatient study, 30 of 57 participants correctly interpreted the prescription. In the written inpatient study, 27 of 57 participants correctly interpreted the prescription. Common misinterpretations in the written inpatient study were substitution of "v" for "r," "l" for "x," "y" for "i," and "o" for "a." In the voice study, none of the 57 participants correctly interpreted the prescription. Common misinterpretations in the voice study include: "z" for "x," and "e" for "i." Common misinterpretations in the outpatient study include: "s" for "o." Appendix B contains the results from the verbal and written prescription studies.

2.2.4 Comments from Other Review Disciplines at Initial Review

In response to the OSE, June 13, 2014 e-mail, the Division of Hematology Products (DHP) did not forward any comments or concerns relating to the proposed proprietary name at the initial phase of the review.

2.2.5 Phonetic and Orthographic Computer Analysis (POCA) Search Results

Table 1 lists the number of names with the combined orthographic and phonetic score of $\geq 50\%$ retrieved from our POCA search organized as highly similar, moderately similar or low similarity for further evaluation.

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¹USAN stem search conducted on June 16, 2014

| Table 1. POCA Search Results | Number of Names |
|---|------------------------|
| Highly similar name pair: combined match percentage score $\geq 70\%$ | 1 |
| Moderately similar name pair: combined match percentage score $\geq 50\%$ to $\leq 69\%$ | 34 |
| Low similarity name pair: combined match percentage score $\leq 49\%$ | 0 |

2.2.6 Safety Analysis of Names with Potential Orthographic, Spelling, and Phonetic Similarities

The name previously submitted, (b) (4) was denied based on the



Our analysis of the 35 names contained in Table 1 determined none of the names will pose a risk for confusion as described in Appendices C through G.

2.2.7 Communication of DMEPA's Analysis at Midpoint of Review

DMEPA communicated our findings to the Division of Hematology Products (DHP) via e-mail on July 18, 2014. At that time we also requested additional information or concerns that could inform our review. Per e-mail correspondence from the DHP on July 18, 2014, they stated no additional concerns with the proposed proprietary name, Zarxio.

3 CONCLUSIONS

The proposed proprietary name is acceptable from both a promotional and safety perspective.

If you have further questions or need clarifications, please contact Kevin Wright, OSE project manager, at 301-796-3621.

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3.1 COMMENTS TO THE APPLICANT

We have completed our review of the proposed proprietary name, Zarxio, and have concluded that this name is acceptable.

If any of the proposed product characteristics as stated in your May 21, 2014 submission are altered, the name must be resubmitted for review.

4 REFERENCES

1. **USAN Stems** (<http://www.ama-assn.org/ama/pub/physician-resources/medical-science/united-states-adopted-names-council/naming-guidelines/approved-stems.page>)

USAN Stems List contains all the recognized USAN stems.

2. Phonetic and Orthographic Computer Analysis (POCA)

POCA is a system that FDA designed. As part of the name similarity assessment, POCA is used to evaluate proposed names via a phonetic and orthographic algorithm. The proposed proprietary name is converted into its phonemic representation before it runs through the phonetic algorithm. Likewise, an orthographic algorithm exists that operates in a similar fashion. POCA is publicly accessible.

Drugs@FDA

Drugs@FDA is an FDA Web site that contains most of the drug products approved in the United States since 1939. The majority of labels, approval letters, reviews, and other information are available for drug products approved from 1998 to the present. Drugs@FDA contains official information about FDA-approved *brand name* and *generic drugs*; *therapeutic biological products*, *prescription* and *over-the-counter* human drugs; and *discontinued drugs* (see Drugs @ FDA Glossary of Terms, available at http://www.fda.gov/Drugs/InformationOnDrugs/ucm079436.htm#ther_biological).

RxNorm

RxNorm contains the names of prescription and many OTC drugs available in the United States. RxNorm includes generic and branded:

- Clinical drugs – pharmaceutical products given to (or taken by) a patient with therapeutic or diagnostic intent
- Drug packs – packs that contain multiple drugs, or drugs designed to be administered in a specified sequence

Radiopharmaceuticals, contrast media, food, dietary supplements, and medical devices, such as bandages and crutches, are all out of scope for RxNorm (<http://www.nlm.nih.gov/research/umls/rxnorm/overview.html#>).

Division of Medication Errors Prevention and Analysis proprietary name consultation requests

This is a list of proposed and pending names that is generated by the Division of Medication Error Prevention and Analysis from the Access database/tracking system.

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APPENDICES

Appendix A

FDA's Proprietary Name Risk Assessment considers the promotional and safety aspects of a proposed proprietary name.

1. **Promotional Assessment:** For prescription drug products, the promotional review of the proposed name is conducted by OPDP. For over-the-counter (OTC) drug products, the promotional review of the proposed name is conducted by DNCE. OPDP or DNCE evaluates proposed proprietary names to determine if they are overly fanciful, so as to misleadingly imply unique effectiveness or composition, as well as to assess whether they contribute to overstatement of product efficacy, minimization of risk, broadening of product indications, or making of unsubstantiated superiority claims. OPDP or DNCE provides their opinion to DMEPA for consideration in the overall acceptability of the proposed proprietary name.
2. **Safety Assessment:** The safety assessment is conducted by DMEPA, and includes the following:
 - a. **Preliminary Assessment:** We consider inclusion of USAN stems or other characteristics that when incorporated into a proprietary name may cause or contribute to medication errors (i.e., dosing interval, dosage form/route of administration, medical or product name abbreviations, names that include or suggest the composition of the drug product, etc.) See prescreening checklist below in Table 2*. DMEPA defines a medication error as any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer.²

***Table 2- Prescreening Checklist for Proposed Proprietary Name**

| | Affirmative answers to these questions indicate a potential area of concern. |
|-----|---|
| Y/N | Does the name have obvious Similarities in Spelling and Pronunciation to other Names? |
| Y/N | Are there Manufacturing Characteristics in the Proprietary Name? |
| Y/N | Are there Medical and/or Coined Abbreviations in the Proprietary Name? |
| Y/N | Are there Inert or Inactive Ingredients referenced in the Proprietary Name? |
| Y/N | Does the Proprietary Name include combinations of Active Ingredients |
| Y/N | Is there a United States Adopted Name (USAN) Stem in the Proprietary Name? |
| Y/N | Is this the same Proprietary Name for Products containing Different Active Ingredients? |
| Y/N | Is this a Proprietary Name of a discontinued product? |

² National Coordinating Council for Medication Error Reporting and Prevention.

<http://www.nccmerp.org/about/MedErrors.html>; Last accessed 10/11/2007. Information that cannot be released to the public***

b. Phonetic and Orthographic Computer Analysis (POCA): Following the preliminary screening of the proposed proprietary name, DMEPA staff evaluates the proposed name against potentially similar names. In order to identify names with potential similarity to the proposed proprietary name, DMEPA enters the proposed proprietary name in POCA and queries the name against the following drug reference databases, Drugs@fda, CernerRxNorm, and names in the review pipeline using a 50% threshold in POCA. DMEPA reviews the combined orthographic and phonetic matches and group the names into one of the following three categories:

- Highly similar pair: combined match percentage score $\geq 70\%$.
- Moderately similar pair: combined match percentage score $\geq 50\%$ to $\leq 69\%$.
- Low similarity: combined match percentage score $\leq 49\%$.

Using the criteria outlined in the check list (Table 3-5) that corresponds to each of the three categories (highly similar pair, moderately similar pair, and low similarity), DMEPA evaluates the name pairs to determine the acceptability or non-acceptability of a proposed proprietary name. Based on our root cause analysis of post marketing experience errors, we find the expression of strength and dose, which is often located in close proximity to the drug name itself on prescriptions and medication orders, is an important factor in mitigating or potentiating confusion between similarly named drug pairs. The ability of other product characteristics to mitigate confusion is limited (e.g., route, frequency, dosage form, etc.).

- For highly similar names, there is little that can mitigate a medication error, including product differences such as strength and dose. Thus, proposed proprietary names that have a combined score of ≥ 70 percent are likely to be rejected by FDA. (See Table 3)
- Moderately similar names with overlapping or similar strengths or doses represent an area for concern for FDA. The dosage and strength information is often located in close proximity to the drug name itself on prescriptions and medication orders can be an important factor that either increases or decreases the potential for confusion between similarly named drug pairs. The ability of other product characteristics (e.g., route, frequency, dosage form, etc.) to mitigate confusion may be limited when the strength or dose overlaps. FDA will review these names further, to determine whether sufficient differences exist to prevent confusion. (See Table 4)
- Names with low similarity that have no overlap or similarity in strength and dose are generally acceptable unless there are data to suggest that the name might be vulnerable to confusion (e.g., prescription simulation study suggests that the name is likely to be misinterpreted as a marketed product). In these instances, we would reassign a low similarity name to the moderate similarity category and review according to the moderately similar name pair checklist (See Table 5).

c. FDA Prescription Simulation Studies: DMEPA staff also conducts a prescription

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simulation studies using FDA health care professionals.

Three separate studies are conducted within the Centers of the FDA for the proposed proprietary name to determine the degree of confusion of the proposed proprietary name 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. The studies employ healthcare professionals (pharmacists, physicians, and nurses), and attempts to simulate the prescription ordering process. The primary Safety Evaluator uses the results to identify orthographic or phonetic vulnerability of the proposed name to be misinterpreted by healthcare practitioners.

In order to evaluate the potential for misinterpretation of the proposed proprietary name in handwriting and verbal communication of the name, inpatient medication orders and/or outpatient prescriptions are written, each consisting of a combination of marketed and unapproved drug products, including the proposed name. These orders are optically scanned and one prescription is delivered to a random sample of participating health professionals via e-mail. In addition, a verbal prescription is recorded on voice mail. The voice mail messages are 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 record their interpretations of the orders which are recorded electronically.

- d. Comments from Other Review Disciplines: DMEPA requests the Office of New Drugs (OND) and/or Office of Generic Drugs (OGD), ONDQA or OBP for their comments or concerns with the proposed proprietary name, ask for any clinical issues that may impact the DMEPA review during the initial phase of the name review. Additionally, when applicable, at the same time DMEPA requests concurrence/non-concurrence with OPDP's decision on the name. The primary Safety Evaluator addresses any comments or concerns in the safety evaluator's assessment.

The OND/OGD Regulatory Division is contacted a second time following our analysis of the proposed proprietary name. At this point, DMEPA conveys their decision to accept or reject the name. The OND or OGD Regulatory Division is requested to provide any further information that might inform DMEPA's final decision on the proposed name.

Additionally, other review disciplines opinions such as ONDQA or OBP may be considered depending on the proposed proprietary name.

When provided, DMEPA considers external proprietary name studies conducted by or for the Applicant/Sponsor and incorporates the findings of these studies into the overall risk assessment.

The DMEPA primary reviewer assigned to evaluate the proposed proprietary name is responsible for considering the collective findings, and provides an overall risk assessment of the proposed proprietary name.

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Table 3. Highly Similar Name Pair Checklist (i.e., combined Orthographic and Phonetic score is $\geq 70\%$).

| | | | |
|---|---|---------------------------|---|
| <p>Answer the questions in the checklist below. Affirmative answers to these questions suggest that the pattern of orthographic or phonetic differences in the names may render the names less likely to confusion, provided that the pair do not share a common strength or dose (see Step 1 of the Moderately Similar Checklist).</p> | | | |
| <u>Orthographic Checklist</u> | | <u>Phonetic Checklist</u> | |
| Y/N | <p>Do the names begin with different first letters? <i>Note that even when names begin with different first letters, certain letters may be confused with each other when scripted.</i></p> | Y/N | <p>Do the names have different number of syllables?</p> |
| Y/N | <p>Are the lengths of the names dissimilar* when scripted? <i>*FDA considers the length of names different if the names differ by two or more letters.</i></p> | Y/N | <p>Do the names have different syllabic stresses?</p> |
| Y/N | <p>Considering variations in scripting of some letters (such as z and f), is there a different number or placement of upstroke/downstroke letters present in the names?</p> | Y/N | <p>Do the syllables have different phonologic processes, such vowel reduction, assimilation, or deletion?</p> |
| Y/N | <p>Is there different number or placement of cross-stroke or dotted letters present in the names?</p> | Y/N | <p>Across a range of dialects, are the names consistently pronounced differently?</p> |
| Y/N | <p>Do the infixes of the name appear dissimilar when scripted?</p> | | |

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| | | | |
|------------|---|--|--|
| Y/N | Do the suffixes of the names appear dissimilar when scripted? | | |
|------------|---|--|--|

Table 4: Moderately Similar Name Pair Checklist (i.e., combined score is $\geq 50\%$ to $\leq 69\%$).

| | |
|--------|--|
| Step 1 | <p>Review the DOSAGE AND ADMINISTRATION and HOW SUPPLIED/STORAGE AND HANDLING sections of the prescribing information (or for OTC drugs refer to the Drug Facts label) to determine if strengths and doses of the name pair overlap or are very similar. Different strengths and doses for products whose names are moderately similar may decrease the risk of confusion between the moderately similar name pairs. Name pairs that have overlapping or similar strengths have a higher potential for confusion and should be evaluated further (see Step 2).</p> <p>For single strength products, also consider circumstances where the strength may not be expressed.</p> <p>For any combination drug products, consider whether the strength or dose may be expressed using only one of the components.</p> <p>To determine whether the strengths or doses are similar to your proposed product, consider the following list of factors that may increase confusion:</p> <ul style="list-style-type: none"> ○ Alternative expressions of dose: 5 mL may be listed in the prescribing information, but the dose may be expressed in metric weight (e.g., 500 mg) or in non-metric units (e.g., 1 tsp, 1 tablet/capsule). Similarly, a strength or dose of 1000 mg may be expressed, in practice, as 1 g, or vice versa. ○ Trailing or deleting zeros: 10 mg is similar in appearance to 100 mg which may potentiate confusion between a name pair with moderate similarity. ○ Similar sounding doses: 15 mg is similar in sound to 50 mg |
|--------|--|

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| | |
|-----------|---|
| Step 2 | Answer the questions in the checklist below. Affirmative answers to these questions suggest that the pattern of orthographic or phonetic differences in the names may render the names less likely to confusion between moderately similar names <u>with</u> overlapping or similar strengths or doses. |
|-----------|---|

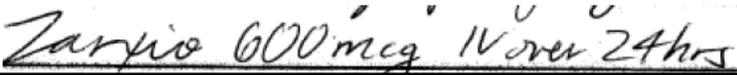
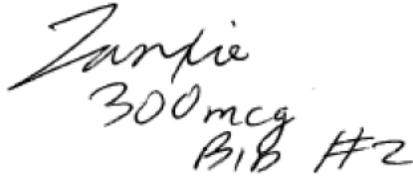
| | | |
|--|--|--|
| | <p>Orthographic Checklist (Y/N to each question)</p> <ul style="list-style-type: none"> • Do the names begin with different first letters? <p>Note that even when names begin with different first letters, certain letters may be confused with each other when scripted.</p> <ul style="list-style-type: none"> • Are the lengths of the names dissimilar* when scripted? <p>*FDA considers the length of names different if the names differ by two or more letters.</p> <ul style="list-style-type: none"> • Considering variations in scripting of some letters (such as <i>z</i> and <i>f</i>), is there a different number or placement of upstroke/downstroke letters present in the names? • Is there different number or placement of cross-stroke or dotted letters present in the names? • Do the infixes of the name appear dissimilar when scripted? • Do the suffixes of the names appear dissimilar when scripted? | <p>Phonetic Checklist (Y/N to each question)</p> <ul style="list-style-type: none"> • Do the names have different number of syllables? • Do the names have different syllabic stresses? • Do the syllables have different phonologic processes, such as vowel reduction, assimilation, or deletion? • Across a range of dialects, are the names consistently pronounced differently? |
|--|--|--|

Table 5: Low Similarity Name Pair Checklist (i.e., combined score is $\leq 49\%$).

In most circumstances, these names are viewed as sufficiently different to minimize confusion. Exceptions to this would occur in circumstances where there are data that suggest a name with low similarity might be vulnerable to confusion with your proposed name (for example, misinterpretation of the proposed name as a marketed product in a prescription simulation study). In such instances, FDA would reassign a low similarity name to the moderate similarity category and review according to the moderately similar name pair checklist.

Appendix B: Prescription Simulation Samples and Results

Figure 1. Zarxio Study (Conducted on July 3, 2013)

| Handwritten Requisition Medication Order | Verbal Prescription |
|--|--|
| <p data-bbox="191 806 435 840"><u>Medication Order:</u></p>  | <p data-bbox="954 806 1036 835">Zarxio</p> <p data-bbox="954 861 1117 890">300 mcg BID</p> <p data-bbox="954 915 997 945">#2</p> |
| <p data-bbox="191 1003 509 1037"><u>Outpatient Prescription:</u></p>  | |

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FDA Prescription Simulation Responses (Aggregate 1 Rx Studies Report)

Study Name: Zarxio

266 People Received Study

97 People Responded

| INTERPRETATION | OUTPATIENT | VOICE | INPATIENT | TOTAL |
|-----------------------|-------------------|--------------|------------------|--------------|
| XARZEO | 0 | 1 | 0 | 1 |
| XARZIO | 0 | 2 | 0 | 2 |
| ZARCIO | 0 | 1 | 0 | 1 |
| ZARSEO | 0 | 1 | 0 | 1 |
| ZARSIO | 0 | 1 | 0 | 1 |
| ZARXIO | 30 | 0 | 27 | 57 |
| ZARXIS | 4 | 0 | 0 | 4 |
| ZARXYO | 0 | 0 | 1 | 1 |
| ZARZEO | 0 | 4 | 0 | 4 |
| ZARZESO | 0 | 1 | 0 | 1 |
| ZARZIL | 0 | 1 | 0 | 1 |
| ZARZIO | 0 | 21 | 0 | 21 |
| ZAVIXO | 0 | 0 | 1 | 1 |
| ZOVXIO | 0 | 0 | 1 | 1 |

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Appendix C: Highly Similar Names (i.e., combined POCA score is $\geq 70\%$)

| No. | Proposed name: Zarxio Strength(s): 300 mcg/0.5 mL 480 mcg/0.8 mL Usual Dose: 5 – 10 mcg/kg/day | POCA Score (%) | Failure prevention reasons |
|-----|--|-------------------|--|
| 1. | (b) (4) | 78 | This name was denied by DMEPA in a previous review (b) (4) Product being reviewed under alternate proprietary name, Zarxio. |

Appendix D: Moderately Similar Names (i.e., combined POCA score is $\geq 50\%$ to $\leq 69\%$) with no overlap or numerical similarity in Strength and/or Dose

| No. | Name | POCA Score (%) |
|-----|-------------|-------------------|
| 1. | Farxiga | 64 |
| 2. | Zeroxin | 60 |
| 3. | (b) (4) | 56 |
| 4. | Zalviso *** | 56 |
| 5. | (b) (4) *** | 55 |
| 6. | (b) (4) | 54 |
| 7. | Marqibo *** | 54 |
| 8. | Zartan | 54 |
| 9. | Zerbaxa *** | 54 |
| 10. | (b) (4) | 53 |
| 11. | Xarelto | 53 |
| 12. | (b) (4) | 52 |
| 13. | (b) (4) | 52 |
| 14. | (b) (4) | 52 |
| 15. | Zarontin | 52 |
| 16. | Verdeso | 51 |

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| | | |
|-----|-------------|----|
| 17. | Arcoxia *** | 51 |
| 18. | Zelrix | 51 |
| 19. | Zorbtive | 51 |
| 20. | Char-Flo | 50 |
| 21. | (b) (4) | 50 |
| 22. | Targocid | 50 |
| 23. | Zaroxolyn | 50 |
| 24. | Zeryndi | 50 |
| 25. | Zephrex | 50 |

Appendix E: Moderately Similar Names (i.e., combined POCA score is $\geq 50\%$ to $\leq 69\%$) with overlap or numerical similarity in Strength and/or Dose

| No. | Proposed name: Zarxio Strength(s): 300 mcg/0.5 mL 480 mcg/0.8 mL Usual Dose: 5 mcg/kg/day 6 mcg/kg/day 10 mcg/kg/day | POCA Score (%) | Prevention of Failure Mode |
|-----|---|----------------|---|
| 1. | Droxia | 53 | The prefix and infix of this name pair have sufficient orthographic differences The first and third syllables of this name pair sound different. |
| 2. | Zactima | 53 | The infix and suffix of this name pair have sufficient orthographic differences The first and third syllables of this name pair sound different. |

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Appendix F: Low Similarity Names (i.e., combined POCA score is ≤49%)

| No. | Name | POCA Score (%) |
|-----|----------------|----------------|
| 1. | Not Applicable | N/A |

Appendix G: Names not likely to be confused or not used in usual practice settings for the reasons described.

| No. | Name | POCA Score (%) | Failure preventions |
|-----|---------|----------------|---|
| 1. | Ziba-Rx | 60 | The brand name of this drug has been discontinued. The established name is bacitracin zinc and is only available in the established name. |
| 2. | Zoxin | 54 | The proprietary name has been discontinued. Established name is hydroxyzine. |
| 3. | (b) (4) | 53 | Product information not found. Checked in AIMS and other FDA databases. |
| 4. | Zorprin | 52 | Product has been discontinued and no longer available under brand or generic. |
| 5. | (b) (4) | 50 | Name was rejected by OPDP. RCM: (b) (4) |
| 6. | Narcof | 50 | Discontinued and no longer available. |

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| | | | |
|----|------------|----|---|
| 7. | Ovarex *** | 50 | 2007-888. No other information could be found. |
| 8. | Sarkosyl | 50 | Product information not found. Checked proprietary name list, AIMS, Panorama and L:Drive. |
| 9. | Virx | 50 | Product information not found. Checked Drugs@FDA, Redbook, F&C, and internal FDA databases. |

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