CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

210933Orig1s000

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)

***** This document contains proprietary information that cannot be released to the public*****

Date of This Review:	August 17, 2020
Application Type and Number:	NDA 210933
Product Name and Strength:	Eysuvis (loteprednol etabonate) ophthalmic suspension, 0.25%
Product Type:	Single Ingredient Product
Rx or OTC:	Prescription (Rx)
Applicant/Sponsor Name:	Kala Pharmaceuticals, Inc. (Kala)
Panorama #:	2020-41070666
DMEPA Safety Evaluator:	Nasim Roosta, PharmD
DMEPA Team Leader:	Otto L. Townsend, PharmD

Contents

1 INTRODUCTION

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

1.1 REGULATORY HISTORY

Kala previously submitted the proposed proprietary name, [(b) (4)]*** on February 17, 2017. However, we found the name, [(b) (4)]*** unacceptable due to orthographic similarities and shared product characteristics with the proprietary name, [(b) (4)] under IND 117192 in 2017-13269234.[a]

On November 8, 2017, Kala submitted the proposed proprietary name, [(b) (4)]***, for review. We found the name, [(b) (4)]*** unacceptable due to potential confusion with the pending name [(b) (4)]*** and the marketed product, [(b) (4)] under IND 117192 in 2018-18841009.[b]

On November 30, 2018, Kala submitted the name, Eysuvis***, for review. We found the name acceptable under NDA 210933 in 2018-27693655.[c] However, on August 7, 2019 a Complete Response letter was issued due to a lack of substantial evidence consisting of adequate and well-controlled investigations. Prior to submission of their complete responses to the identified deficiencies, we found the name, Eysuvis*** unacceptable due to potential confusion with the pending proposed proprietary name, [(b) (4)]***, which was under Agency review.[d]

On April 30, 2020, Kala submitted the proposed proprietary name, [(b) (4)]***, for review. In the meantime, Kala negotiated with the sponsor, [(b) (4)] of the conflicting name, [(b) (4)]***, and [(b) (4)] submitted a request to withdraw their proprietary name, [(b) (4)]***, on [(b) (4)]

Thus, on July 2, 2020, Kala withdrew its request for review of alternate proposed proprietary name, [(b) (4)]*** and resubmitted a request for review of the preferred proposed proprietary name, Eysuvis***.

1.2 PRODUCT INFORMATION

The following product information is provided in the proprietary name submission received on April 30, 2020 and cross-referenced in the proprietary name submission received on July 2, 2020.

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[a] Patel, M. Proprietary Name Review for [(b) (4)]*** (IND 117192). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2017 AUG 04. Panorama No. 2017- 13269234.

[b] Patel, M. Proprietary Name Review for [(b) (4)]*** (IND 117192). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2018 MAR 05. Panorama No. 2018-18841009.

[c] Roosta, N. Proprietary Name Review for Eysuvis*** (NDA 210933). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2019 FEB 25. Panorama No. 2018-27693655.

[d] Roosta, N. Proprietary Name Review Memo for Eysuvis*** (NDA 210933). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2020 APR 7. Panorama No. 2018-27693655-1.

- Intended Pronunciation: i-su-vis
- Active Ingredient: loteprednol etabonate
- Indication of Use: for the short-term treatment of the signs and symptoms of dry eye disease.
- Route of Administration: ophthalmic
- Dosage Form: ophthalmic suspension
- Dose and Frequency: One to two drops into each eye four times daily for two weeks.
- How Supplied: in a 10 mL nominal capacity white low-density polyethylene (LDPE) dropper bottle
- Storage: Upright at 15°-25°C (59°-77°F). Do not freeze.

2 RESULTS

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

2.1 MISBRANDING ASSESSMENT

The Office of Prescription Drug Promotion (OPDP) determined that Eysuvis would not misbrand the proposed product. The Division of Medication Error Prevention and Analysis (DMEPA) and the Division of Ophthalmology (DO) concurred with the findings of OPDP's assessment for Eysuvis.

2.2 SAFETY ASSESSMENT

The following aspects were considered in the safety evaluation of the proposed proprietary name, Eysuvis.

2.2.1 United States Adopted Names (USAN) Search

There is no USAN stem present in the proposed proprietary name[e].

2.2.2 Components of the Proposed Proprietary Name

Kala did not provide a derivation or intended meaning for the proposed proprietary name, Eysuvis, 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 Comments from Other Review Disciplines at Initial Review

In response to the OSE, July 29, 2020 e-mail, the Division of Ophthalmology (DO) did not forward any comments or concerns relating to Eysuvis at the initial phase of the review.

[e] USAN stem search conducted on July 6, 2020.

2.2.4 FDA Name Simulation Studies

Eighty-one (81) practitioners participated in DMEPA's prescription studies for Eysuvis. The responses did not overlap with any currently marketed products nor did the responses sound or look similar to any currently marketed products or any products in the pipeline. Appendix B contains the results from the verbal and written prescription studies.

2.2.5 Phonetic and Orthographic Computer Analysis (POCA) Search Results

Our POCA search from December 12, 2018 identified twenty-nine (29) names with the combined score of ≥55% or individual orthographic or phonetic score of ≥70%. We had identified and evaluated some of the names in our previous proprietary name review[c]. We re-evaluated the previously identified names of concern considering any lessons learned from recent post-marketing experience, which may have altered our previous conclusion regarding the acceptability of the name. We note that none of the product characteristics have changed and we agree with the findings from our previous review for the names evaluated previously. Therefore, we identified five (5) names not previously analyzed. These names are included in Table 1 below.

2.2.6 Names Retrieved for Review Organized by Name Pair Similarity

Table 1 lists the number of names retrieved from our POCA search. These name pairs are categorized as moderately similar for further evaluation.

Table 1. Names Retrieved for Review Organized by Name Pair Similarity

Similarity Category	Number of Names
Highly similar name pair: combined match percentage score ≥70%	0
Moderately similar name pair: combined match percentage score ≥55% to ≤ 69%	5
Low similarity name pair: combined match percentage score ≤54%	0

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

Our analysis of the five (5) names contained in Table 1 determined none of the names will pose a risk for confusion with Eysuvis as described in Appendix E.

2.2.8 Communication of DMEPA's Analysis at Midpoint of Review

DMEPA communicated our findings to the Division of Ophthalmology (DO) via e-mail on August 13, 2020. At that time we also requested additional information or concerns that could inform our review. On August 17, 2020, they did not state any additional concerns with the proposed proprietary name, Eysuvis.

3 CONCLUSION

The proposed proprietary name, Eysuvis, is acceptable.

If you have any questions or need clarifications, please contact Oyinlola Fashina, OSE project manager, at 301-796-4446.

3.1 COMMENTS TO KALA PHARMACEUTICALS, INC.

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

If any of the proposed product characteristics as stated in your submission, received on April 30, 2020 (as referenced in your submission received on July 2, 2020), are altered prior to approval of the marketing application, the name must be resubmitted for review.

4 REFERENCES

1. USAN Stems (https://www.ama-assn.org/about/united-states-adopted-names-approved-stems)

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.

APPENDICES

Appendix A

FDA's Proprietary Name Risk Assessment evaluates proposed proprietary names for misbranding and safety concerns.

1. **Misbranding Assessment**: For prescription drug products, OPDP assesses the name for misbranding concerns. For over-the-counter (OTC) drug products, the misbranding assessment of the proposed name is conducted by DNDP. OPDP or DNDP evaluates proposed proprietary names to determine if the name is false or misleading, such as by making misrepresentations with respect to safety or efficacy. For example, a fanciful proprietary name may misbrand a product by suggesting that it has some unique effectiveness or composition when it does not (21 CFR 201.10(c)(3)). OPDP or DNDP 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. [f]

[f] National Coordinating Council for Medication Error Reporting and Prevention. http://www nccmerp.org/aboutMedErrors html. Last accessed 10/11/2007.

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

	Answer the questions in the checklist below. Affirmative answers to any of these questions indicate a potential area of concern that should be carefully evaluated as described in this guidance.
Y/N	**Is the proposed name obviously similar in spelling and pronunciation to other names?**
	Proprietary names should not be similar in spelling or pronunciation to proprietary names, established names, or ingredients of other products.
Y/N	**Are there inert or inactive ingredients referenced in the proprietary name?**
	Proprietary names should not incorporate any reference to an inert or inactive ingredient in a way that might create an impression that the ingredient's value is greater than its true functional role in the formulation (21 CFR 201.10(c)(4)).
Y/N	**Does the proprietary name include combinations of active ingredients?**
	Proprietary names of fixed combination drug products should not include or suggest the name of one or more, but not all, of its active ingredients (see 21 CFR 201.6(b)).
Y/N	**Is there a United States Adopted Name (USAN) stem in the proprietary name?**
	Proprietary names should not incorporate a USAN stem in the position that USAN designates for the stem.
Y/N	**Is this proprietary name used for another product that does not share at least one common active ingredient?**
	Drug products that do not contain at least one common active ingredient should not use the same (root) proprietary name.
Y/N	**Is this a proprietary name of a discontinued product?**
	Proprietary names should not use the proprietary name of a discontinued product if that discontinued drug product does not contain the same active ingredients.

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 55% 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 ≥70%.
- Moderately similar pair: combined match percentage score ≥55% to ≤ 69%.
- Low similarity: combined match percentage score ≤54%.

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. The intent of these checklists is to increase the transparency and predictability of the safety determination of whether a proposed name is vulnerable to confusion from a look-alike or sound-alike perspective. Each bullet below corresponds to the name similarity category cross-references the respective table that addresses criteria that DMEPA uses to determine whether a name presents a safety concern from a look-alike or sound-alike perspective.

- For highly similar names, differences in product characteristics often cannot mitigate the risk of a medication error, including product differences such as strength and dose. Thus, proposed proprietary names that have a combined score of ≥ 70 percent are at risk for a look-alike sound-alike confusion which is an area of concern (See Table 3).
- Moderately similar names are further evaluated to identify the presence of attributes that are known to cause name confusion.
    - Name attributes: We note that the beginning of the drug name plays a significant role in contributing to confusion. Additionally, drug name pairs that start with the same first letter and contain a shared letter string of at least 3 letters in both names are major contributing factor in the confusion of drug names[g]. We evaluate all moderately similar names retrieved from POCA to identify the above attributes. These names are further evaluated to identify overlapping or similar strengths or doses.
    - Product attributes: Moderately similar names of products that have overlapping or similar strengths or doses represent an area for concern for FDA. The dose and strength information is often located in close proximity to the drug name itself on prescriptions and medication orders, and the information 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 to mitigate confusion (e.g., route, frequency, dosage form) may be limited when the strength or dose overlaps. DMEPA reviews such 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 (See Table 5) 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.

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[g] Shah, M, Merchant, L, Characteristics That May Help in the Identification of Potentially Confusing Proprietary Drug Names. Therapeutic Innovation & Regulatory Science, September 2016

c. FDA Prescription Simulation Studies: DMEPA staff also conducts a prescription simulation studies using FDA health care professionals.

   Four 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, verbal pronunciation of the drug name or during computerized provider order entry. 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 vulnerability of the proposed name to be misinterpreted by healthcare practitioners during written, verbal, or electronic prescribing.

   In order to evaluate the potential for misinterpretation of the proposed proprietary name during written, verbal, or electronic prescribing of the name, written inpatient medication orders, written outpatient prescriptions, verbal orders, and electronic orders are simulated, each consisting of a combination of marketed and unapproved drug products, including the proposed name.

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.

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

Answer the questions in the checklist below. Affirmative answers to some of 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 does not share a common strength or dose.			
Orthographic Checklist		Phonetic Checklist	
Y/N	Do the names begin with different first letters? *Note that even when names begin with different first letters, certain letters may be confused with each other when scripted.*	**Y/N**	Do the names have different number of syllables?
Y/N	Are the lengths of the names dissimilar* when scripted? **FDA considers the length of names different if the names differ by two or more letters.*	**Y/N**	Do the names have different syllabic stresses?
Y/N	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?	**Y/N**	Do the syllables have different phonologic processes, such vowel reduction, assimilation, or deletion?
Y/N	Is there different number or placement of cross-stroke or dotted letters present in the names?	**Y/N**	Across a range of dialects, are the names consistently pronounced differently?
Y/N	Do the infixes of the name appear dissimilar when scripted?		
Y/N	Do the suffixes of the names appear dissimilar when scripted?		

Table 4: Moderately Similar Name Pair Checklist (i.e., combined score is ≥55% to ≤69%).

Step 1	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 or doses have a higher potential for confusion and should be evaluated further (see Step 2). Because the strength or dose could be used to express an order or prescription for a particular drug product, overlap in one or both of these components would be reason for further evaluation. For single strength products, also consider circumstances where the strength may not be expressed. For any i.e. drug products comprised of more than one active ingredient, consider whether the strength or dose may be expressed using only one of the components. To determine whether the strengths or doses are similar to your proposed product, consider the following list of factors that may increase confusion: • 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
Step 2	Answer the questions in the checklist below. Affirmative answers to some of these questions suggest that the pattern of orthographic or phonetic differences in the names may reduce the likelihood of confusion for moderately similar names **with** overlapping or similar strengths or doses.

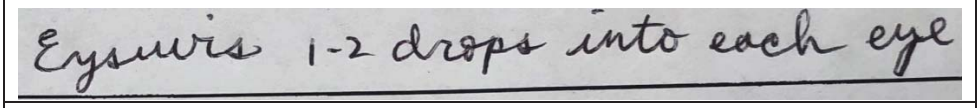
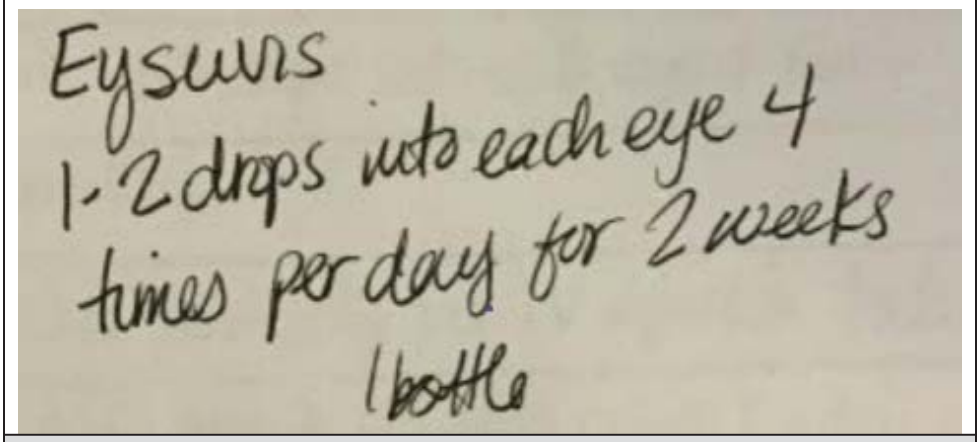
	Orthographic Checklist (Y/N to each question) • Do the names begin with different first letters? Note that even when names begin with different first letters, certain letters may be confused with each other when scripted. • Are the lengths of the names dissimilar* when scripted? *FDA considers the length of names different if the names differ by two or more letters. • 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? • 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?	Phonetic Checklist (Y/N to each question) • Do the names have different number of syllables? • Do the names have different syllabic stresses? • Do the syllables have different phonologic processes, such 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 ≤54%).

Names with low similarity 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.

Appendix B: Prescription Simulation Samples and Results

Figure 1. Eysuvis Study (Conducted on July 17, 2020)

Handwritten Medication Order/Prescription	Verbal Prescription
Medication Order:  Outpatient Prescription:  **CPOE Study Sample (displayed as sans-serif, 12-point, bold font)** Eysuvis	Eysuvis Instill 1-2 drops into each eye 4 times per day for 2 weeks dispense 1 bottle

FDA Prescription Simulation Responses (Aggregate Report)

207 People Received Study
81 People Responded

Study Name: Eysuvis

Total	27	19	14	21	
INTERPRETATION	**OUTPATIENT**	**CPOE**	**VOICE**	**INPATIENT**	**TOTAL**
ARTUVUS	0	0	1	0	1
ERYSUVIS	0	0	0	1	1
ERYZUVIS	0	0	0	1	1
EYSEURIS	1	0	0	0	1
EYSEURS	2	0	0	0	2
EYSUIRIS	1	0	0	0	1
EYSUIRS	4	0	0	4	8

EYSURIS	2	0	0	1	3
EYSURS	1	0	0	0	1
EYSUURS	0	0	0	1	1
EYSUVIS	15	19	0	12	46
EYSUVIZ	0	0	0	1	1
EYUVIS	1	0	0	0	1
ISUVAS	0	0	2	0	2
ISUVETT	0	0	1	0	1
ISUVIS	0	0	6	0	6
ISUVISC	0	0	1	0	1
ISUZAS	0	0	1	0	1
ONSUVIS	0	0	2	0	2

Appendix C: Highly Similar Names (e.g., combined POCA score is ≥70%)

No.	**Proposed name:** Eysuvis **Established name:** loteprednol etabonate **Dosage form:** ophthalmic suspension **Strength(s):** 0.25% **Usual Dose:** 1-2 drops into each eye 4 times per day for 2 weeks	**POCA Score (%)**	**Orthographic and/or phonetic differences in the names sufficient to prevent confusion** **Other prevention of failure mode expected to minimize the risk of confusion between these two names.**
	N/A		

Appendix D: Moderately Similar Names (e.g., combined POCA score is ≥55% to ≤69%) with no overlap or numerical similarity in Strength and/or Dose

No.	Name	POCA Score (%)
	N/A	

Appendix E: Moderately Similar Names (e.g., combined POCA score is ≥55% to ≤69%) with overlap or numerical similarity in Strength and/or Dose

No.	**Proposed name:** Eysuvis **Established name:** loteprednol etabonate **Dosage form:** ophthalmic suspension **Strength(s):** 0.25% **Usual Dose:** 1-2 drops into each eye 4 times per day for 2 weeks	**POCA Score (%)**	**Prevention of Failure Mode** **In the conditions outlined below, the following combination of factors, are expected to minimize the risk of confusion between these two names**
1.	(b) (4) ***	63	This name pair has sufficient orthographic and phonetic differences.
2.	(b) (4) ***	62	This name pair has sufficient orthographic and phonetic differences.
3.	(b) (4) ***	62	This name pair has sufficient orthographic and phonetic differences.
4.	Hymovis	58	This name pair has sufficient orthographic and phonetic differences.
5.	(b) (4) ***	56	This name pair has sufficient orthographic and phonetic differences.

Appendix F: Low Similarity Names (e.g., combined POCA score is ≤54%)

No.	Name	POCA Score (%)
	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
	N/A		

Appendix H: Names not likely to be confused due to absence of attributes that are known to cause name confusion[h].

No.	Name	POCA Score (%)
	N/A	

[h] Shah, M, Merchant, L, Chan, I, and Taylor, K. Characteristics That May Help in the Identification of Potentially Confusing Proprietary Drug Names. Therapeutic Innovation & Regulatory Science, September 2016

This is a representation of an electronic record that was signed electronically. Following this are manifestations of any and all electronic signatures for this electronic record.

/s/

NASIM N ROOSTA
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OTTO L TOWNSEND
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PROPRIETARY NAME MEMORANDUM

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)

***** This document contains proprietary information that cannot be released to the public*****

Date of This Review:	April 7, 2020
Application Type and Number:	NDA 210933
Product Name and Strength:	Eysuvis (loteprednol etabonate) ophthalmic suspension, 0.25%
Product Type:	Single Ingredient Product
Rx or OTC:	Prescription (Rx)
Applicant/Sponsor Name:	Kala Pharmaceuticals, Inc. (Kala)
Panorama #:	2018-27693655-1
DMEPA Safety Evaluator:	Nasim Roosta, PharmD
DMEPA Team Leader:	Otto L. Townsend, PharmD
DMEPA Deputy Director:	Irene Z. Chan, PharmD, BCPS

1 INTRODUCTION

This memorandum is to amend the previous decision regarding the acceptability of the proposed proprietary name, Eysuvis, which was found conditionally acceptable under NDA 210933 on February 26, 2019.[a] We note that a conflict exists with another similar pending proposed proprietary name that is currently under review.

2 DISCUSSION

DMEPA had previously reviewed the proposed proprietary name, Eysuvis, under NDA 210933 and issued a ***CONDITIONALLY ACCEPTABLE*** letter for this name. Additionally, we note the Agency issued a Complete Response letter to the applicant on August 7, 2019. Since the time of our previous decision, we have identified a conflict with another pending proposed proprietary name that is currently under review. The proposed name, Eysuvis, could result in medication errors due to confusion with (b) (4)***. Our evaluation of this name pair has altered our previous conclusion regarding the acceptability of the proposed proprietary name. The rationale for the risk of confusion is described below.

Eysuvis vs. (b) (4)***

(b) (4)

[redacted]

[a] Roosta, N. Proprietary Name Review for Eysuvis (NDA 210933). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2019 FEB 25. Panorama No. 2018-27693655.

[b] POCA search conducted on February 20, 2020 in version 4.2.

We acknowledge that our conclusion differs from that of the external study submitted in support of this proposed proprietary name. However, (b) (4) did not identify (b) (4)*** in the external study since (b) (4)*** is a pending proprietary name.

Additionally, we note that this decision differs from our previous decision regarding the acceptability of the proposed proprietary name, Eysuvis. However, when Eysuvis was previously evaluated, the proposed proprietary name, (b) (4)***, was not yet submitted for review by the Agency.

2.1 COMMUNICATION OF DMEPA'S ANALYSIS

DMEPA communicated our findings to the Division of Ophthalmology (DO) via e-mail on April 7, 2020.

3 CONCLUSION

The proposed proprietary name is not acceptable from a safety perspective. The proposed proprietary name, Eysuvis, is vulnerable to name confusion with (b) (4)***.

If you have any questions or need clarifications, please contact Mammah Borbor, OSE project manager, at 301-796-7731.

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[c] Schiff GD Mirica MM, Dhavle AA, Galanter WL, Lambert B, Wright A. A Prescription for Enhancing Electronic Prescribing Safety. Health Affairs 2018; 37(11): 1877-1883

[d] ISMP's List of Error-Prone Abbreviations, Symbols, and Dose Designations [Internet]. Horsham (PA): Institute for Safe Medication Practices. 2015 [cited 2020 MAR 25]. Available from: https://www.ismp.org/tools/errorproneabbreviations.pdf

[e] Institute for Safe Medication Practices. Safety briefs: Similar drug names confused. ISMP Med Saf Alert Acute Care. 2014;19(12):1-5.

3.1 COMMENTS TO KALA PHARMACEUTICALS, INC. (KALA)

Your proposed name was found conditionally acceptable on February 26, 2019. Since that time, we have determined that your proposed proprietary name, Eysuvis, could result in medication errors due to confusion with another product that is currently under review. Therefore, the ultimate acceptability of your proposed proprietary name, Eysuvis, is dependent upon which underlying application is approved first. If another product is approved prior to your product, with a name that would be confused with your proposed name of Eysuvis, you will be requested to submit another name.

We acknowledge that our conclusion differs from that of the (b) (4) external study submitted in support of the proposed proprietary name. However, the pending proprietary name is also under review and thus was not identified by the (b) (4) external study.

This is a representation of an electronic record that was signed electronically. Following this are manifestations of any and all electronic signatures for this electronic record.

/s/

NASIM N ROOSTA
04/07/2020 12:30:00 PM

OTTO L TOWNSEND
04/07/2020 04:56:34 PM

IRENE Z CHAN
04/07/2020 05:13:55 PM

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)

***** This document contains proprietary information that cannot be released to the public*****

Date of This Review:	February 25, 2019
Application Type and Number:	NDA 210933
Product Name and Strength:	Eysuvis (loteprednol etabonate) ophthalmic suspension, 0.25%
Product Type:	Single Ingredient Product
Rx or OTC:	Prescription (Rx)
Applicant/Sponsor Name:	Kala Pharmaceuticals, Inc. (Kala)
Panorama #:	2018-27693655
DMEPA Safety Evaluator:	Nasim Roosta, PharmD
DMEPA Team Leader:	Otto L. Townsend, PharmD

Contents

1 INTRODUCTION

This review evaluates the proposed proprietary name, Eysuvis, from a safety and misbranding perspective. The sources and methods used to evaluate the proposed proprietary name are outlined in the reference section and Appendix A respectively. Kala submitted an external name study, conducted by [redacted], for this proposed proprietary name.

1.1 REGULATORY HISTORY

Kala previously submitted the proposed proprietary name, [redacted]*** on February 17, 2017. However, we found the name, [redacted]*** unacceptable due to orthographic similarities and shared product characteristics with the proprietary name, [redacted] under IND 117192 in 2017-13269234.[a] On November 8, 2017, Kala submitted the name, [redacted]***, for review. We found the name, [redacted]*** unacceptable due to potential confusion with the pending name [redacted]*** and the marketed product [redacted] under IND 117192 in 2018-18841009.[b]

Thus, Kala submitted the name, Eysuvis, for review on November 30, 2018.

1.2 PRODUCT INFORMATION

The following product information is provided in the proprietary name submission received on November 30, 2018.

- Intended Pronunciation: i-su-vis
- Active Ingredient: loteprednol etabonate
- Indication of Use: for temporary relief of the signs and symptoms of dry eye disease.
- Route of Administration: ophthalmic
- Dosage Form: ophthalmic suspension
- Dose and Frequency: One to two drops into each eye four times daily for two weeks.
- How Supplied: in a 10 mL nominal capacity white low-density polyethylene (LDPE) dropper bottle
- Storage: Upright at 15°-25°C (59°-77°F). Do not freeze.

2 RESULTS

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

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[a] Patel, M. Proprietary Name Review for [redacted]*** (IND 117192). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2017 AUG 04. Panorama No. 2017- 13269234.

[b] Patel, M. Proprietary Name Review for [redacted]*** (IND 117192). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2018 MAR 05. Panorama No. 2018-18841009.

2.1 MISBRANDING ASSESSMENT

The Office of Prescription Drug Promotion (OPDP) determined that Eysuvis would not misbrand the proposed product. The Division of Medication Error Prevention and Analysis (DMEPA) and the Division of Transplant and Ophthalmology Products (DTOP) concurred with the findings of OPDP's assessment for Eysuvis.

2.2 SAFETY ASSESSMENT

The following aspects were considered in the safety evaluation of the proposed proprietary name, Eysuvis.

2.2.1 United States Adopted Names (USAN) Search

There is no USAN stem present in the proposed proprietary name[c].

2.2.2 Components of the Proposed Proprietary Name

Kala did not provide a derivation or intended meaning for the proposed proprietary name, Eysuvis, in their submission. This proprietary name is comprised of a single word. We note that Eysuvis might bring to mind the word 'eye' due to the prefix. However, use of this product in the eye is consistent with the product's labeling (indicated for temporary relief of the signs and symptoms of dry eye disease and is instilled into the eyes). Therefore, we do not find that this poses additional risks for medication error. In addition, the proposed proprietary name does not contain any other components (i.e. a modifier, dosage form, etc.) that are misleading or can contribute to medication error.

2.2.3 Comments from Other Review Disciplines at Initial Review

In response to the OSE, December 21, 2018 e-mail, the Division of Transplant and Ophthalmology Products (DTOP) did not forward any comments or concerns relating to Eysuvis at the initial phase of the review.

2.2.4 FDA Name Simulation Studies

Fifty-six (56) practitioners participated in DMEPA's prescription studies for Eysuvis. The responses did not overlap with any currently marketed products nor did the responses sound or look similar to any currently marketed products or any products in the pipeline. Appendix B contains the results from the verbal and written prescription studies.

2.2.5 Phonetic and Orthographic Computer Analysis (POCA) Search Results

Our POCA search[d] identified 29 names with a combined phonetic and orthographic score of ≥55% or an individual phonetic or orthographic score ≥70%**.** These names are included in Table 1 below.

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[c] USAN stem search conducted on December 13, 2018.

[d] POCA search conducted on December 12, 2018 in version 4.2.

2.2.6 Names Retrieved for Review Organized by Name Pair Similarity

Table 1 lists the number of names retrieved from our POCA search and the (b) (4) external study. These name pairs are organized as highly similar, moderately similar or low similarity for further evaluation.

Table 1. Names Retrieved for Review Organized by Name Pair Similarity

Similarity Category	Number of Names
Highly similar name pair: combined match percentage score ≥70%	1
Moderately similar name pair: combined match percentage score ≥55% to ≤ 69%	26
Low similarity name pair: combined match percentage score ≤54%	94

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

Our analysis of the 121 names contained in Table 1 determined none of the names will pose a risk for confusion with Eysuvis as described in Appendices C through H.

2.2.8 Communication of DMEPA's Analysis at Midpoint of Review

DMEPA communicated our findings to the Division of Transplant and Ophthalmology Products (DTOP) via e-mail on February 15, 2019. At that time we also requested additional information or concerns that could inform our review. The Division of Transplant and Ophthalmology Products (DTOP) did not state any additional concerns with the proposed proprietary name, Eysuvis.

3 CONCLUSION

The proposed proprietary name, Eysuvis, is acceptable.

If you have any questions or need clarifications, please contact Danyal Chaudhry, OSE project manager, at 301-796-3813.

3.1 COMMENTS TO KALA PHARMACEUTICALS, INC.

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

If any of the proposed product characteristics as stated in your submission, received on November 30, 2018, are altered prior to approval of the marketing application, the name must be resubmitted for review.

4 REFERENCES

1. USAN Stems (https://www.ama-assn.org/about/united-states-adopted-names-approved-stems)

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.

APPENDICES

Appendix A

FDA's Proprietary Name Risk Assessment evaluates proposed proprietary names for misbranding and safety concerns.

1. **Misbranding Assessment**: For prescription drug products, OPDP assesses the name for misbranding concerns. For over-the-counter (OTC) drug products, the misbranding assessment of the proposed name is conducted by DNDP. OPDP or DNDP evaluates proposed proprietary names to determine if the name is false or misleading, such as by making misrepresentations with respect to safety or efficacy. For example, a fanciful proprietary name may misbrand a product by suggesting that it has some unique effectiveness or composition when it does not (21 CFR 201.10(c)(3)). OPDP or DNDP 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. [e]

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[e] National Coordinating Council for Medication Error Reporting and Prevention. http://www nccmerp.org/aboutMedErrors html. Last accessed 10/11/2007.

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

	Answer the questions in the checklist below. Affirmative answers to any of these questions indicate a potential area of concern that should be carefully evaluated as described in this guidance.
Y/N	**Is the proposed name obviously similar in spelling and pronunciation to other names?**
	Proprietary names should not be similar in spelling or pronunciation to proprietary names, established names, or ingredients of other products.
Y/N	**Are there inert or inactive ingredients referenced in the proprietary name?**
	Proprietary names should not incorporate any reference to an inert or inactive ingredient in a way that might create an impression that the ingredient's value is greater than its true functional role in the formulation (21 CFR 201.10(c)(4)).
Y/N	**Does the proprietary name include combinations of active ingredients?**
	Proprietary names of fixed combination drug products should not include or suggest the name of one or more, but not all, of its active ingredients (see 21 CFR 201.6(b)).
Y/N	**Is there a United States Adopted Name (USAN) stem in the proprietary name?**
	Proprietary names should not incorporate a USAN stem in the position that USAN designates for the stem.
Y/N	**Is this proprietary name used for another product that does not share at least one common active ingredient?**
	Drug products that do not contain at least one common active ingredient should not use the same (root) proprietary name.
Y/N	**Is this a proprietary name of a discontinued product?**
	Proprietary names should not use the proprietary name of a discontinued product if that discontinued drug product does not contain the same active ingredients.

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 55% 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 ≥70%.
- Moderately similar pair: combined match percentage score ≥55% to ≤ 69%.

- Low similarity: combined match percentage score ≤54%.

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. The intent of these checklists is to increase the transparency and predictability of the safety determination of whether a proposed name is vulnerable to confusion from a look-alike or sound-alike perspective. Each bullet below corresponds to the name similarity category cross-references the respective table that addresses criteria that DMEPA uses to determine whether a name presents a safety concern from a look-alike or sound-alike perspective.

- For highly similar names, differences in product characteristics often cannot mitigate the risk of a medication error, including product differences such as strength and dose. Thus, proposed proprietary names that have a combined score of ≥ 70 percent are at risk for a look-alike sound-alike confusion which is an area of concern (See Table 3).
- Moderately similar names are further evaluated to identify the presence of attributes that are known to cause name confusion.
    - Name attributes: We note that the beginning of the drug name plays a significant role in contributing to confusion. Additionally, drug name pairs that start with the same first letter and contain a shared letter string of at least 3 letters in both names are major contributing factor in the confusion of drug names[f]. We evaluate all moderately similar names retrieved from POCA to identify the above attributes. These names are further evaluated to identify overlapping or similar strengths or doses.
    - Product attributes: Moderately similar names of products that have overlapping or similar strengths or doses represent an area for concern for FDA. The dose and strength information is often located in close proximity to the drug name itself on prescriptions and medication orders, and the information 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 to mitigate confusion (e.g., route, frequency, dosage form) may be limited when the strength or dose overlaps. DMEPA reviews such 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 (See Table 5) 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

[f] Shah, M, Merchant, L, Characteristics That May Help in the Identification of Potentially Confusing Proprietary Drug Names. Therapeutic Innovation & Regulatory Science, September 2016

a low similarity name to the moderate similarity category and review according to the moderately similar name pair checklist.

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

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

Answer the questions in the checklist below. Affirmative answers to some of 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 does not share a common strength or dose.			
Orthographic Checklist		Phonetic Checklist	
Y/N	Do the names begin with different first letters? *Note that even when names begin with different first letters, certain letters may be confused with each other when scripted.*	**Y/N**	Do the names have different number of syllables?
Y/N	Are the lengths of the names dissimilar* when scripted? **FDA considers the length of names different if the names differ by two or more letters.*	**Y/N**	Do the names have different syllabic stresses?
Y/N	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?	**Y/N**	Do the syllables have different phonologic processes, such vowel reduction, assimilation, or deletion?
Y/N	Is there different number or placement of cross-stroke or dotted letters present in the names?	**Y/N**	Across a range of dialects, are the names consistently pronounced differently?
Y/N	Do the infixes of the name appear dissimilar when scripted?		
Y/N	Do the suffixes of the names appear dissimilar when scripted?		

Table 4: Moderately Similar Name Pair Checklist (i.e., combined score is ≥55% to ≤69%).

Step 1	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 or doses have a higher potential for confusion and should be evaluated further (see Step 2). Because the strength or dose could be used to express an order or prescription for a particular drug product, overlap in one or both of these components would be reason for further evaluation. For single strength products, also consider circumstances where the strength may not be expressed. For any i.e. drug products comprised of more than one active ingredient, consider whether the strength or dose may be expressed using only one of the components. To determine whether the strengths or doses are similar to your proposed product, consider the following list of factors that may increase confusion: • 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
Step 2	Answer the questions in the checklist below. Affirmative answers to some of these questions suggest that the pattern of orthographic or phonetic differences in the names may reduce the likelihood of confusion for moderately similar names **with** overlapping or similar strengths or doses.

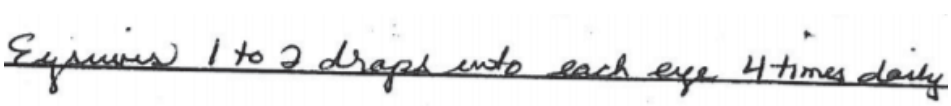
	Orthographic Checklist (Y/N to each question) • Do the names begin with different first letters? Note that even when names begin with different first letters, certain letters may be confused with each other when scripted. • Are the lengths of the names dissimilar* when scripted? *FDA considers the length of names different if the names differ by two or more letters. • 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? • 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?	Phonetic Checklist (Y/N to each question) • Do the names have different number of syllables? • Do the names have different syllabic stresses? • Do the syllables have different phonologic processes, such vowel reduction, assimilation, or deletion? • Across a range of dialects, are the names consistently pronounced differently?

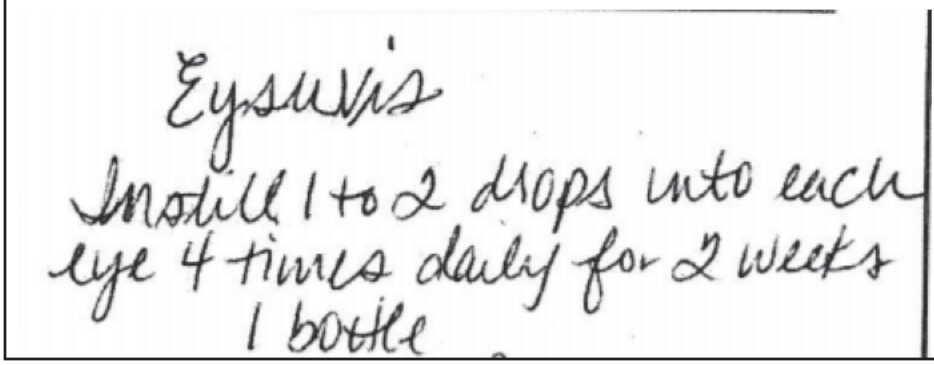
Table 5: Low Similarity Name Pair Checklist (i.e., combined score is ≤54%).

Names with low similarity 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.

Appendix B: Prescription Simulation Samples and Results

Figure 1. Eysuvis Study (Conducted on December 7, 2018)

Handwritten Medication Order/Prescription	Verbal Prescription
Medication Order: 	Eysuvis Instill 1 to 2 drops into each

Outpatient Prescription:  	eye 4 times daily for 2 weeks Dispense 1 bottle

FDA Prescription Simulation Responses (Aggregate Report)

252 People Received Study
38 People Responded

Study Name: Eysuvis

Total	16	12	10	
INTERPRETATION	**OUTPATIENT**	**VOICE**	**INPATIENT**	**TOTAL**
EPSUVIS	0	0	1	1
EYRUVIS	0	0	1	1
EYSIVUS	0	0	1	1
EYSUVIR	0	0	1	1
EYSUVIS	16	0	6	22
HYSUVES	0	1	0	1
HYSUVIS	0	3	0	3
ISUEVUS	0	1	0	1
ISUVIS	0	6	0	6
ISUVUS	0	1	0	1

Appendix C: Highly Similar Names (e.g., combined POCA score is ≥70%)

No.	**Proposed name:** Eysuvis **Established name:** loteprednol etabonate **Dosage form:** ophthalmic suspension **Strength(s):** 0.25% **Usual Dose:** Instill 1-2 drops per eye 4 times a day for 2 weeks	POCA Score (%)	**Orthographic and/or phonetic differences in the names sufficient to prevent confusion** **Other prevention of failure mode expected to minimize the risk of confusion between these two names.**
1.	Eysuvis	100	Name under review.

Appendix D: Moderately Similar Names (e.g., combined POCA score is ≥55% to ≤69%) with no overlap or numerical similarity in Strength and/or Dose

No.	Name	POCA Score (%)
2.	Eovist	58
3.	Eliquis	56
4.	Ventavis	56
5.	Evamist	55

Appendix E: Moderately Similar Names (e.g., combined POCA score is ≥55% to ≤69%) with overlap or numerical similarity in Strength and/or Dose

No.	**Proposed name:** Eysuvis **Established name:** loteprednol etabonate **Dosage form:** ophthalmic suspension **Strength(s):** 0.25% **Usual Dose:** Instill 1-2 drops per eye 4 times a day for 2 weeks	POCA Score (%)	**Prevention of Failure Mode** **In the conditions outlined below, the following combination of factors, are expected to minimize the risk of confusion between these two names**
6.	(b) (4)***	56	This name pair has sufficient orthographic and phonetic differences.
7.	Synvisc	56	This name pair has sufficient orthographic and phonetic differences.

Appendix F: Low Similarity Names (e.g., combined POCA score is ≤54%)

No.	Name	POCA Score (%)
8.	Keveyis	54
9.	(b) (4)***	52
10.	Crysvita	50

No.	Name	POCA Score (%)
11.	Prevymis	50
12.	Vosevi	50
13.	Mepsevii	46
14.	Sinuva	43
15.	Vyxeos	42
16.	Dexycu Kit	40
17.	Siklos	40
18.	Tavalisse	40
19.	Heplisav-B	39
20.	Austedo	38
21.	Jaimiess	38
22.	Adzenys ER	36
23.	Besponsa	36
24.	Solosec	35
25.	Symfi	35
26.	Mvasi	34
27.	Eskata	34
28.	Lumify	34
29.	Vyzulta	34
30.	Yescarta	34
31.	Ixifi	32
32.	Mavyret	32
33.	Ogivri	32
34.	Rhopressa	32
35.	Symfi Lo	32
36.	Ozempic	31
37.	Cinvanti	30
38.	Fiasp	30
39.	Shingrix	30
40.	Bydureon Bcise	29
41.	Firvanq Kit	29
42.	Symdeko	29
43.	Verzenio	29
44.	Carospir	28
45.	Hailey Fe 1/20	28
46.	Lusduna	28
47.	Segluromet	28
48.	Gocovri	27
49.	Cyltezo	26
50.	Impoyz	26
51.	Osmolex ER	26
52.	Steglujan	26
53.	Sublocade	26

No.	Name	POCA Score (%)
54.	Tydemy	26
55.	Xepi	26
56.	Abilify Mycite	24
57.	Biktarvy	23
58.	Ilumya	23
59.	Aliqopa	22
60.	Apadaz	22
61.	Clenpiq	22
62.	Erleada	22
63.	Fasenra	22
64.	Giapreza	22
65.	Radiogenix System	22
66.	Trelegy Ellipta	22
67.	Zilretta	22
68.	Ascor	20
69.	Calquence	20
70.	Duzallo	20
71.	Fiasp Flextouch	20
72.	Idhifa	20
73.	Vabomere	20
74.	Juluca	19
75.	Lutathera	19
76.	Lyrica CR	19
77.	Macrilen	18
78.	Ztlido	18
79.	Cimduo	17
80.	Kymriah	17
81.	Jynarque	16
82.	Nikita	16
83.	Nityr	16
84.	Qvar Redihaler	16
85.	Steglatro	16
86.	Zumandimine	16
87.	Admelog	15
88.	Hemlibra	15
89.	Kedrab	15
90.	Lo-Zumandimine	15
91.	Altafluor Benox	14
92.	Xhance	14
93.	Drax Exametazime	12
94.	Goprelto	12
95.	Luxturna	12
96.	Clorotekal	10

No.	Name	POCA Score (%)
97.	Flac	10
98.	Balcoltra	8
99.	Prexxartan	8
100.	Trogarzo	8
101.	Lonhala Magnair	5

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
102.	(b) (4) ***	69	Proposed proprietary name withdrawn by the Applicant. Product approved under the proprietary name, Xhance
103.	Evovist	66	Name identified in RxNorm database. Unable to find product characteristics in commonly used drug databases.
104.	Estrovis	64	Brand discontinued with no generic equivalents available. NDA 016768 withdrawn FR effective 03/27/1996.
105.	Isovex	62	Name identified in RxNorm database. Product is deactivated and no generic equivalents are available.
106.	Vertavis	62	Approved as an anti-hypertensive under NDA 005691 which was withdrawn FR effective 11/05/1992. Product contained *Veratrum viride*, which is an herbaceous perennial plant and ingredient currently included in homeopathic products used for flu and cold symptoms. However, unable to find specific product characteristics in commonly used drug databases for the formerly marketed Vertavis.
107.	Estivin	60	Name identified in RxNorm database. Unable to find product characteristics in commonly used drug databases.
108.	(b) (4) ***	58	This is an alternate proposed proprietary name for NDA 205029. NDA 205029 was approved and marketed under the established name.
109.	(b) (4) ***	56	Proposed proprietary name for IND (b) (4) found unacceptable by DMEPA (OSE# (b) (4) IND (b) (4) is pending and no new names have been submitted.
110.	Exodus	56	This is a veterinary product.

No.	Name	POCA Score (%)	Failure preventions
111.	Levius	56	Name identified in RxNorm database. Unable to find product characteristics in commonly used drug databases.
112.	(b) (4) ***	56	Proposed proprietary name, (b) (4) ***, for IND 117192 (for indication of dry eye) found unacceptable by DMEPA (OSE# 2017- 13269234 dated 08/4/2017). The name, (b) (4) was then submitted in which we found unacceptable. Eysuvis, which is the subject of this review, was submitted for review under NDA 210933.
113.	Easotic	55	This is a veterinary product.
114.	Osmovist 190	55	Brand discontinued with no generic equivalents available. NDA 019580 withdrawn FR effective 06/10/1999.
115.	Osmovist 240	55	Brand discontinued with no generic equivalents available. NDA 019580 withdrawn FR effective 06/10/1999.

Appendix H: Names not likely to be confused due to absence of attributes that are known to cause name confusion[g].

No.	Name	POCA Score (%)
116.	Isovate	57
117.	Vovesi	57
118.	Ursinus	56
119.	Uceris	56
120.	Perseris	56
121.	Subsys	56

[g] Shah, M, Merchant, L, Chan, I, and Taylor, K. Characteristics That May Help in the Identification of Potentially Confusing Proprietary Drug Names. Therapeutic Innovation & Regulatory Science, September 2016

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/s/

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