

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

022388Orig1s000

PROPRIETARY NAME REVIEW(S)

PROPRIETARY NAME REVIEW

Division of Medication Error Prevention and Analysis 1 (DMEPA 1)
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 23, 2021
Application Type and Number:	NDA 022388
Product Name and Strength:	Acuvue Theravision with Ketotifen (etafilcon A contact lens with ketotifen) 0.019 mg ketotifen per contact lens
Product Type:	Combination Product (Drug-Device)
Rx or OTC:	Prescription (Rx)
Applicant/Sponsor Name:	Johnson & Johnson Vision Care, Inc. (JJVC)
PNR ID #:	2021-1044723992
DMEPA 1 Safety Evaluator:	Deborah Myers, RPh, MBA
DMEPA 1 Team Leader:	Valerie S. Vaughan, PharmD
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1 INTRODUCTION

This review evaluates the proposed proprietary name, Acuvue Theravision with Ketotifen, 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. JJVC did not submit an external name study for this proposed proprietary name.

1.1 REGULATORY HISTORY

JJVC previously submitted the proposed proprietary name, Acuvue Theravision with Ketotifen, for review on October 13, 2017. We found the name, Acuvue Theravision with Ketotifen, conditionally acceptable under IND 066883.^a

Thus, on May 27, 2021, JJVC submitted the name, Acuvue Theravision with Ketotifen, for review under NDA 022388.

1.2 PRODUCT INFORMATION

The following product information is provided in the proprietary name submission received on May 27, 2021.

- Intended Pronunciation: a' kue vue ther ah vi' zhun wið key toe tif fen
- Active Ingredient: ketotifen
- Lens Material: etafilcon A
- Indication of Use: Daily disposable contact lens:
 - For correcting refractive ametropia (myopia and hyperopia) in phakic or aphakic patients who are suitable for contact lens wear and experience ocular allergic itch due to allergic conjunctivitis and who do not have red eye(s) or more than 1.00D of astigmatism.
 - Contain an H1 antihistamine receptor antagonist for the prevention of itch associated with allergic conjunctivitis experienced by contact lens users (b)(4)
[REDACTED] The prevention of itch has been demonstrated to last through 12 hours in clinical studies; however, the contact lens may be worn for longer than 12 hours for vision correction.
- Route of Administration: ophthalmic
- Dosage Form: sterile contact lens
- Strength: 0.019 mg ketotifen per contact lens
- Dose and Frequency: insert one contact lens per eye per day
 - worn for less than 24 hours, while awake, and should be discarded upon removal

^a Kolejian, S. Proprietary Name Review for Acuvue Theravision with Ketotifen (IND 066883). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2017 DEC 15. Panorama No. 2017-16035909.

- How Supplied: Each contact lens is supplied in a foil-sealed plastic package containing a buffered ketotifen solution. The plastic package is marked with base curve, diopter power, diameter, lot number and expiration date. Each carton contains 30 lens.
- Storage: Store at room temperature [15° to 25°C (59°-77°F)]. Protect from light – store lens in carton until use.
- Reference Product: Zaditor (ketotifen fumarate) ophthalmic solution, 0.025% (NDA 021066)

2 RESULTS

The following sections provide information obtained and considered in the overall evaluation of the proposed proprietary name, Acuvue Theravision with Ketotifen.

2.1 MISBRANDING ASSESSMENT

The Office of Prescription Drug Promotion (OPDP) determined that Acuvue Theravision with Ketotifen would not misbrand the proposed product. The Division of Medication Error Prevention and Analysis 1 (DMEPA 1) and the Division of Ophthalmology (DO) concurred with the findings of OPDP's assessment for Acuvue Theravision with Ketotifen.

2.2 SAFETY ASSESSMENT

The following aspects were considered in the safety evaluation of the proposed proprietary name, Acuvue Theravision with Ketotifen.

2.2.1 *United States Adopted Names (USAN) Search*

The proposed proprietary name modifier, Theravision with Ketotifen, contains the United States Adopted Name (USAN) stem '-io-.' The USAN stem '-io-' in the infix position is used by the USAN Council to indicate iodine-containing contrast media products.^b Proprietary names should not incorporate USAN stems in the position that USAN designates for the stem.^c The use of a USAN stem within proprietary names, even when used consistently with the USAN meaning, can result in multiple similar proprietary names and proprietary names that are similar to established names, thus increasing the chance of confusion among those drugs, which may compromise patient safety. To reduce the potential for confusion, USAN stems should not be incorporated into proprietary names.

However, we determined that the two-letter stem 'io' is often not distinct enough to be recognized as a USAN stem. We also note that USAN Council has allowed the use of the stem 'io' in established names (e.g., vortioxetine) as well as in other USAN stems (-tioxetine). This has resulted in conflicting stems, and therefore in those instances, the stem does not support the USAN Council naming convention or accurately indicate the pharmacological or chemical trait of the drug. Additionally, based on our post marketing experience, we do not have the same

^b USAN stem search conducted on June 7, 2021.

^c Guidance for industry: Best practices in developing proprietary names for drugs. Draft Guidance May 2014. <http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM39899>

safety concerns with the two-letter stems, including ‘io’, that we have identified with USAN stems containing three or more letters.

Therefore, we do not object to the inclusion of the two-letter USAN stem ‘io’, incorporated into the proposed proprietary name Acuvue Theravision with Ketotifen.

2.2.2 Components of the Proposed Proprietary Name

JJVC indicated in their submission that “Acuvue” is the parent name of contact lenses manufactured by Johnson & Johnson Vision Care, “Theravision” is a unique name to be applied to this specific brand of contact lenses containing an active pharmaceutical ingredient, and “Ketotifen” is the established name of the active ingredient. We note that this proprietary name is comprised of multiple words, the root name, “Acuvue” and the modifier, “Theravision with Ketotifen.” We previously evaluated the use of the root name, “Acuvue” and the modifier, “Theravision with Ketotifen,” and found them conditionally acceptable under IND 066883.^d We note that none of the product characteristics have changed and we agree with the evaluation and findings regarding the root name, “Acuvue” and the modifier, “Theravision with Ketotifen,” from our previous review.

We note that the root name, “Acuvue,” includes the letter string ‘Ac-’, a medical abbreviation for “before a meal” (i.e., taking a medication dosage before meals) and the modifier “Theravision” includes the letter strings ‘-er-’, an abbreviation for the dosage formulation “extended-release” and ‘-ra-’, a medical abbreviation for “rheumatoid arthritis.” In some circumstances, the incorporation of medical abbreviations in proprietary names can inadvertently be a source of error. For more information see, *Best Practices in Developing Proprietary Names for Human Prescription Drug Products*.^e Although we typically discourage the inclusion of medical abbreviations in proprietary names, we determined that the abbreviations, ‘ac’ in the prefix of the root name, “Acuvue,” as well as the abbreviations ‘er’ and ‘ra’ in the infix of the modifier, “Theravision,” are unlikely to be separated from the surrounding letters or be misunderstood within the context of a script in a manner that would lead to confusion in this case. Thus, in this case, we do not object to the inclusion of the letter strings ‘ac,’ ‘er,’ and ‘ra’ in the proposed proprietary name.

2.2.3 Comments from Other Review Disciplines at Initial Review

On June 16, 2021, the Division of Ophthalmology (DO) did not forward any comments or concerns relating to Acuvue Theravision with Ketotifen at the initial phase of the review.

2.2.4 FDA Name Simulation Studies

One hundred twenty-eight practitioners participated in DMEPA’s prescription studies for Acuvue Theravision with Ketotifen. We note that 2 of the Rx simulation study participants (2

^d Kolejian, S. Proprietary Name Review for Acuvue Theravision with Ketotifen (IND 066883). Silver Spring (MD): FDA, CDER, OSE, DMEPA (US); 2017 DEC 15. Panorama # 2017-16035909.

^e Guidance for Industry: Best Practices in Developing Proprietary Names for Human Prescription Drug Products. 2020. Available from: <https://www.fda.gov/regulatory-information/search-fda-guidance-documents>.

outpatient) did not include the modifier “Theravision with Ketotifen” and 5 additional study participants (4 voice and 1 outpatient) did not include “ketotifen” as part of the modifier in their response.

The remaining 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 prescription simulation studies.

2.2.5 *Phonetic and Orthographic Computer Analysis (POCA) Search Results*

The Applicant indicates that these contact lenses may be dispensed at a retail pharmacy. We note that while the root name, Acuvue, currently exists on the market, the name does not currently exist in commonly used drug databases and may not currently appear in retail pharmacy systems since it has been a name marketed for contact lens devices and not drugs. Therefore, in this particular case we conducted a POCA search of the root name, “Acuvue” and the root name plus modifier, “Acuvue Theravision with ketotifen” to assess the risk of name confusion with the introduction of these contact lenses in drug databases and retail pharmacy systems. Our POCA search^f identified 65 names with a combined phonetic and orthographic score of $\geq 55\%$ or an individual phonetic or orthographic score $\geq 70\%$. 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 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 $\geq 70\%$	3
Moderately similar name pair: combined match percentage score $\geq 55\%$ to $\leq 69\%$	59
Low similarity name pair: combined match percentage score $\leq 54\%$	3

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

Our analysis of the 65 names contained in Table 1 determined none of the names will pose a risk for confusion with Acuvue Theravision with Ketotifen as described in Appendices C through H.

^f POCA search conducted on July 27, 2021 in version 4.4.

2.2.8 *Communication of DMEPA's Analysis at Midpoint of Review*

DMEPA 1 communicated our findings to the Division of Ophthalmology (DO). At that time we also requested additional information or concerns that could inform our review. On August 20, 2021, the Division of Ophthalmology (DO) stated no additional concerns with the proposed proprietary name, Acuvue Theravision with Ketotifen.

3 CONCLUSION

The proposed proprietary name, Acuvue Theravision with Ketotifen, 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 JOHNSON & JOHNSON VISION CARE, INC.

We have completed our review of the proposed proprietary name, Acuvue Theravision with Ketotifen, and have concluded that this name is acceptable.

If any of the proposed product characteristics as stated in your submission, received on May 27, 2021, 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. ^g

^g National Coordinating Council for Medication Error Reporting and Prevention. <https://www.nccmerp.org/about-medication-errors> Last accessed 10/05/2020.

***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 $\geq 70\%$.
 - Moderately similar pair: combined match percentage score $\geq 55\%$ to $\leq 69\%$.

- Low similarity: combined match percentage score $\leq 54\%$.

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^h. 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

^h 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.

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 $\geq 70\%$).

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.			
<u>Orthographic Checklist</u>		<u>Phonetic Checklist</u>	
Y/N	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>	Y/N	Do the names have different number of syllables?
Y/N	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>	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 as 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 $\geq 55\%$ to $\leq 69\%$).

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 <u>with</u> overlapping or similar strengths or doses.

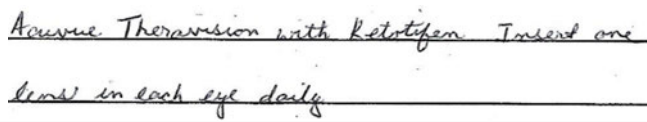
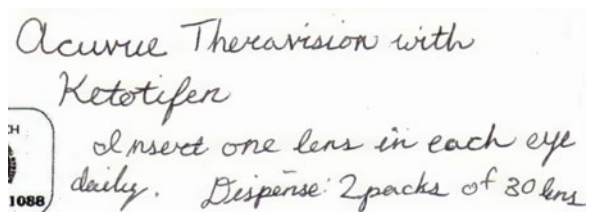
	Orthographic Checklist (Y/N to each question) - Do the names begin with different first letters? Note that even when names begin with different first letters, certain letters may be confused with each other when scripted. - Are the lengths of the names dissimilar* when scripted? *FDA considers the length 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?
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Table 5: Low Similarity Name Pair Checklist (i.e., combined score is $\leq 54\%$).

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. Acuvue Theravision with Ketotifen Study (Conducted on June 11, 2021)

Handwritten Medication Order/Prescription	Verbal Prescription
Medication Order: 	Acuvue Theravision with Ketotifen Insert one lens in each eye daily. Dispense 2 packs of 30 lens
Outpatient Prescription: 	
CPOE Study Sample (displayed as sans-serif, 12-point, bold font) Acuvue Theravision with Ketotifen	

FDA Prescription Simulation Responses (Aggregate Report)

265 People Received Study
128 People Responded

Study Name: Acuvue Theravision with Ketotifen

Total	41	28	27	32	
INTERPRETATION	OUTPATIENT	CPOE	VOICE	INPATIENT	TOTAL
AACUVUE THERAVISION WITH KETOTIFEN	0	0	0	1	1
ACCUVIEW THERAVISION W/KETOTIFIN	0	0	1	0	1
ACCUVIEW THERAVISION WITH ?	0	0	1	0	1
ACCUVIEW THERAVISION WITH KETOFIN	0	0	1	0	1
ACCUVIEW THERAVISION WITH KETOTIFEN	0	0	1	0	1
ACCUVUE THERAVISION	0	0	1	0	1
ACCUVUE THERAVISION W/KETOTIFEN	0	0	1	0	1

ACCVUE THERAVISION WITH KETOTIFEN	0	0	1	0	1
ACCVUE THERAVISION WITH KETOTIPIN	0	0	1	0	1
ACCVUVIEW SERA VISION	0	0	1	0	1
ACIVIE THERAVISION WITH KETOTIFEN	0	0	0	1	1
ACUVIEW THERAVISION WITH KETOTIFEN	0	0	1	0	1
ACUVIEW THERAVISION WITH KETOTIPIN	0	0	1	0	1
ACUVRIE THERAVISION WITH KETOTIFEN	1	0	0	0	1
ACUVUE	2	0	0	0	2
ACUVUE CLEARER VISION WITH KETOTIFEN	0	0	1	0	1
ACUVUE PERIVISION WITH KETOTIFIN	0	0	1	0	1
ACUVUE TERAVISION WITH KETOTIFEN	0	0	0	1	1
ACUVUE THERA VISION WITH KETOTIFEN	0	0	0	1	1
ACUVUE THERARVISION WITH KETOTYPHAN	0	0	1	0	1
ACUVUE THERAVISION	1	0	1	0	2
ACUVUE THERAVISION REPEATO	0	0	1	0	1
ACUVUE THERAVISION W/ KETOTIFEN	0	0	0	1	1
ACUVUE THERAVISION W/ KETOTIPFEN	0	0	1	0	1
ACUVUE THERAVISION W/KETOTIFEN	0	0	0	2	2
ACUVUE THERAVISION W/KETOTIFER	1	0	0	0	1
ACUVUE THERAVISION WITH KEOTIFEN	1	0	0	0	1
ACUVUE THERAVISION WITH KETOIFEN	1	0	0	0	1
ACUVUE THERAVISION WITH KETOIFER	1	0	0	0	1

ACUVUE THERAVISION WITH KETOTIFEN	25	28	6	23	82
ACUVUE THERAVISION WITH KETOTIFER	7	0	0	0	7
ACUVUE THERAVISION WITH KETOTIFIN	0	0	2	0	2
ACUVUE THERAVISION WITH KETOTIPIN	0	0	2	0	2
ACUVUE THERAVISION WITH KETOTOFIN	1	0	0	0	1
ACUVUE THERAVISION WITH RETOTIFEN	0	0	0	1	1
AOUVUE THERAVISION WITH KETOTIFEN	0	0	0	1	1

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

No.	Proposed name: Acuvue Theravision with Ketotifen Established name: etafilcon A contact lens with ketotifen Dosage form: sterile contact lens Strength(s): 0.019 mg ketotifen per contact lens Usual Dose: insert one contact lens per eye per day; worn for less than 24 hours, while awake, and should be discarded upon removal	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.
		POCA Search “Acuvue”	POCA Search “Acuvue-theravision-with-ketotifen”	
1.	Acuvue	100		Name is the root name of the subject of this review.
2.	Acuvue Theravision With Ketotifen***		100	Name is the subject of this review.
3.	Acuvail	70		The suffixes (-ue vs. -ail) the dotted letter -i- and upstroke of the letter -l- at the end of the suffix provide sufficient orthographic differences. In addition, Acuvue Theravision with Ketotifen contains the modifier “Theravision with Ketotifen” making the pair look different when written, if included. Phonetically, the third syllables (vue vs. vail) provide sufficient phonetic differences. In addition, Acuvue Theravision with Ketotifen contains the modifier “Theravision with Ketotifen” making the pair sound different when spoken, if included.

No.	Proposed name: Acuvue Theravision with Ketotifen Established name: etafilcon A contact lens with ketotifen Dosage form: sterile contact lens Strength(s): 0.019 mg ketotifen per contact lens Usual Dose: insert one contact lens per eye per day; worn for less than 24 hours, while awake, and should be discarded upon removal	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.
		POCA Search “Acuvue”	POCA Search “Acuvue-theravision-with-ketotifen”	
				We note that prescriptions for contact lenses would need to specify information such as Diameter (DIA), Diopter (D) (Lens Power), and Base Curve (BC), thus providing further differentiation.

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

No.	Name	POCA Score (%)	
		POCA Search “Acuvue”	POCA Search “Acuvue-theravisionwith-ketotifen”
1.	Accuneb	62	
2.	Accutane	59	
3.	Accupro	56	
4.	Active Q	56	

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

No.	Proposed name: Acuvue Theravision with Ketotifen Established name: etafilcon A contact lens with ketotifen Dosage form: sterile contact lens Strength(s): 0.019 mg ketotifen per contact lens Usual Dose: insert one contact lens per eye per day; worn for less than 24 hours, while awake, and should be discarded upon removal	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
		POCA Search “Acuvue”	POCA Search “Acuvue- theravision- with- ketotifen”	
1.	Acova	67		This name pair has sufficient orthographic and phonetic differences.
2.	Isovue-200	66		This name pair has sufficient orthographic and phonetic differences.
3.	Isovue-250	66		This name pair has sufficient orthographic and phonetic differences.
4.	Isovue-300	66		This name pair has sufficient orthographic and phonetic differences.
5.	Isovue-370	66		This name pair has sufficient orthographic and phonetic differences.
6.	Macuvite	64		This name pair has sufficient orthographic and phonetic differences.
7.	Preservision With Lutein		64	This name pair has sufficient orthographic and phonetic differences.
8.	Advil Dual Action With Acetaminophen		62	This name pair has sufficient orthographic and phonetic differences.
9.	Aluvea	62		This name pair has sufficient orthographic and phonetic differences.
10.	(b) (4) ***	60		This name pair has sufficient orthographic and phonetic differences.

No.	Proposed name: Acuvue Theravision with Ketotifen Established name: etafilcon A contact lens with ketotifen Dosage form: sterile contact lens Strength(s): 0.019 mg ketotifen per contact lens Usual Dose: insert one contact lens per eye per day; worn for less than 24 hours, while awake, and should be discarded upon removal	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
		POCA Search “Acuvue”	POCA Search “Acuvue-theravision-with-ketotifen”	
11.	Accrufer	56		This name pair has sufficient orthographic and phonetic differences.
12.	Aclovate	56		This name pair has sufficient orthographic and phonetic differences.
13.	Atazanavir Sulfate and Ritonavir		56	This name pair has sufficient orthographic and phonetic differences.

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

No.	Name	POCA Score (%)	
		POCA Search “Acuvue”	POCA Search “Acuvue-theravision-withketotifen”
1.	Evac-U-Gen	52	
2.	Accu	48	
3.	Theravision***		40

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
		POCA Search "Acuvue"	POCA Search "Acuvue-theravision-with-ketotifen"	
1.	Accuzyme	66		Name identified in RxNorm database. Product is deactivated and no generic equivalents are available.
2.	Isovue-128	66		Name identified in RxNorm database. Product is deactivated and no generic equivalents are available.
3.	Aquavite-E	58		Name identified in RxNorm database. Unable to find product characteristics in commonly used drug databases.
4.	Antitussive Brand Of Guaifenesin		57	Name identified in RxNorm database. Unable to find product characteristics in commonly used drug databases.
5.	Acetated Ringer's In Plastic Container		56	Brand discontinued with no generic equivalents available. NDA 018725 withdrawn FR effective 11/12/20215.
6.	Acpuris Intensive Spot Treatment		56	Name identified in RxNorm database. Unable to find product characteristics in commonly used drug databases.
7.	Ajuga Turkestanica Top Extract		56	Name identified in RxNorm database. Unable to find product characteristics in commonly used drug databases.
8.	(b) (4) ***	56		Proposed proprietary name, (b) (4) found to be conditionally acceptable (b) (4) Entire application (b) (4) withdrawn by the Applicant on (b) (4)

No.	Name	POCA Score (%)		Failure preventions
		POCA Search “Acuvue”	POCA Search “Acuvue- theravision- with- ketotifen”	
9.	Acupan	55		International product marketed in France, Russia, Belgium, and New Zealand. International product formerly marketed in Israel, South Africa, Switzerland, Ukraine, Italy, Spain, Ireland, and the United Kingdom.

Appendix H: Names not likely to be confused due to absence of attributes that are known to cause name confusionⁱ.

No.	Name	POCA Score (%)	
		POCA Search “Acuvue”	POCA Search “Acuvue- theravisionwith- ketotifen”
1.	Ocuvite	62	
2.	Lactoferrin (Synthetic Human)		60
3.	Moschus Berezovskii Musk Sac Resin		60
4.	[13C] Urea	58	
5.	Covace	58	
6.	Covera	58	
7.	Ultravist 300 In Plastic Container		58
8.	Caduet	57	
9.	Esoterica Sensitive Skin		57
10.	Euphrasia Officinalis Preparation		57
11.	Menthac Arthritis Cream With Capsaicin		57
12.	(b) (4) ***		57
13.	Vachellia Farnesiana Whole Extract		57
14.	Cantharis Vesicatoria Preparation		56
15.	Carbocaine With Neocobefrin		56
16.	Carbocaine With Neo-Cobefrin		56
17.	Cervus Elaphus Velvet Preparation		56

ⁱ 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

No.	Name	POCA Score (%)	
		POCA Search “Acuvue”	POCA Search “Acuvue- theravisionwith- ketotifen”
18.	Copaifera Officinalis Resin		56
19.	(b) (4) ***	56	
20.	Equine Diphtheria Antitoxin		56
21.	Ocufen	56	
22.	Poliovirus Vaccine, Inactivated		56
23.	Sars-Cov-2 (Covid-19) Vaccine, mRNA Spike Protein		56
24.	(b) (4) ***	56	
25.	Vitis Vinifera Anthocyanins Extract		56
26.	Cervus Elaphus Horn Preparation		55
27.	Expectorant Brand Of Guaifenesin		55
28.	Hepatitis A Vaccine, Inactivated		55
29.	Parietaria Officinalis Extract		55
30.	Recuvyra	55	
31.	Sanguisorba Officinalis Top Extract		55
32.	Sucrose Tetrastearate Triacetate		55
33.	Vicks Nature Fusion Cough And Chest Congestion		55

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/s/

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