

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

761037Orig1s000

PROPRIETARY NAME REVIEW(S)

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 21, 2017
Application Type and Number: BLA 761037
Product Name and Strength: Kevzara (sarilumab)
Injection
150 mg/1.14 mL and 200 mg /1.14 mL
Product Type: Single ingredient, drug-device combination product
Rx or OTC: Rx
Applicant/Sponsor Name: Sanofi
Panorama #: 2017- 14384760
DMEPA Primary Reviewer: Teresa McMillan, PharmD
DMEPA Team Leader (Acting): Sarah K. Vee, PharmD

1 INTRODUCTION

This memorandum is to reassess the proposed proprietary name, Kevzara, which was found conditionally acceptable under BLA 761037 on June 1, 2016.^a We note that all product characteristics remain the same.

2 METHODS AND DISCUSSION

2.1 MISBRANDING ASSESSMENT

The Office of Prescription Drug Promotion (OPDP) determined that the proposed name would not misbrand the proposed product. DMEPA and the Division of Pulmonary, Allergy and Rheumatology Products (DPARP) concurred with the findings of OPDP's assessment of the proposed name.

2.2 SAFETY ASSESSMENT

For re-assessment of the proposed proprietary name, DMEPA 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 proposed proprietary name. Additionally, DMEPA searched the USAN stem list to determine if the name contains any USAN stems as of the last USAN updates. The April 21, 2017 search of USAN stems did not find any USAN stems in the proposed proprietary name.

3 CONCLUSIONS

Our re-assessment did not identify any names that represent a potential source of drug name confusion. Therefore, we maintain that the proposed proprietary name is acceptable.

If you have any questions or need clarifications, please contact Michael Sinks, OSE project manager, at 240-402-2684.

3.1 COMMENTS TO THE APPLICANT

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

If any of the proposed product characteristics as stated in your March 22, 2017 submission are altered prior to approval of the marketing application, the name must be resubmitted for review.

^aMcMillan, Teresa. Proprietary Name Review for Kevzara (BLA761037). Silver Spring (MD): Food and Drug Administration, Center for Drug Evaluation and Research, Office of Surveillance and Epidemiology, Division of Medication Error Prevention and Analysis (US); 2016JUN01Panorama No. 2016-3067263.

4 REFERENCES

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

USAN Stems List contains all the recognized USAN stems.

APPEARS THIS WAY ON ORIGINAL

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

/s/

TERESA S MCMILLAN
04/21/2017

SARAH K VEE
04/21/2017

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: June 1, 2016
Application Type and Number: BLA 761037
Product Name and Strength: Kevzara (sarilumab)
Injection
150 mg/1.14 mL and 200 mg /1.14 mL
Product Type: Drug-Device Combination Product
Rx or OTC: Rx
Applicant/Sponsor Name: Sanofi
Panorama #: 2016-3067263
DMEPA Primary Reviewer: Teresa McMillan, PharmD
DMEPA Team Leader: Mishale Mistry, PharmD, MPH
DMEPA Deputy Director: Lubna Merchant, PharmD, MS

Contents

1	INTRODUCTION.....	1
1.1	Regulatory History.....	1
1.2	Product Information.....	1
2	RESULTS.....	1
2.1	Misbranding Assessment.....	1
2.2	Safety Assessment.....	2
3	CONCLUSIONS.....	4
3.1	Comments to the Applicant.....	5
4	REFERENCES.....	6
	APPENDICES.....	7

1 INTRODUCTION

This review evaluates the proposed proprietary name, Kevzara, from a safety and misbranding perspective. The sources and methods used to evaluate the proposed name are outlined in the reference section and Appendix A respectively. The Applicant submitted an external name study, conducted by (b) (4) for this product.

1.1 REGULATORY HISTORY

The Applicant previously submitted the proposed proprietary name, (b) (4)*** on November 5, 2014 and December 30, 2015. The Division of Medication Error Prevention and Analysis (DMEPA) found the name, (b) (4)*** acceptable in OSE Reviews #2014-42173 and 2015-1938621, dated April 20, 2015 and December 18, 2015, respectively. However, Sanofi withdrew the proposed proprietary name, (b) (4)*** on March 31, 2016.

Thus, the Applicant submitted the name, Kevzara, for review on March 16, 2016.

1.2 PRODUCT INFORMATION

The following product information is provided in the March 16, 2016 proprietary name submission.

- Intended Pronunciation: KEV za ra
- Active Ingredient: sarilumab
- Indication of Use: treatment of rheumatoid arthritis in adult patients with moderately to severely active rheumatoid arthritis who have had an inadequate response or intolerance to one or more Disease-Modifying Anti-Rheumatic Drugs (DMARDs).
- Route of Administration: Subcutaneous
- Dosage Form: Injection
- Strength: 150 mg/1.14 mL, 200 mg/1.14mL
- Dose and Frequency:
 - 200 mg once every two weeks
 - 150 mg once every 2 weeks is recommended for management of neutropenia, thrombocytopenia and elevated liver enzymes
- How Supplied: Supplied as a sterile, preservative-free liquid solution in a single-dose pre-filled syringe (2 syringes per pack).
- Storage: Refrigerate at 36°F to 46°F (2°C to 8°C). Do not freeze.
Protect from light by storage in the original carton until time of use.

2 RESULTS

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

2.1 MISBRANDING ASSESSMENT

The Office of Prescription Drug Promotion (OPDP) determined that the proposed name would not misbrand the proposed product. DMEPA and the Division of Pulmonary, Allergy and Rheumatology Products (DPARP) concurred with the findings of OPDP's assessment of the proposed name.

2.2 SAFETY ASSESSMENT

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

2.2.1 *United States Adopted Names (USAN) Search*

There is no USAN stem present in the proprietary name¹.

2.2.2 *Components of the Proposed Proprietary Name*

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

2.2.3 *FDA Name Simulation Studies*

One hundred practitioners participated in DMEPA's prescription studies. 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.

2.2.4 *Comments from Other Review Disciplines at Initial Review*

In response to the OSE, April 16, 2016 e-mail, the Division of Pulmonary, Allergy and Rheumatology Products (DPARP) did not forward any comments or concerns relating to the proposed proprietary name at the initial phase of the review.

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

Table 1 lists the number of names with the combined orthographic and phonetic score of $\geq 50\%$ retrieved from our POCA search² organized as highly similar, moderately similar or low similarity for further evaluation. Table 1 also includes names identified by Brandpersand.

Table 1. POCA Search Results	Number of Names
Highly similar name pair: combined match percentage score $\geq 70\%$	1

¹USAN stem search conducted on April 15, 2016.

² POCA search conducted on April 15, 2016.

Moderately similar name pair: combined match percentage score $\geq 50\%$ to $\leq 69\%$	72
Low similarity name pair: combined match percentage score $\leq 49\%$	1

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

Our analysis of the 74 names contained in Table 1 determined that none of the names pose a risk for confusion as described in Appendices C through H.

2.2.7 Communication of DMEPA’s Analysis at Midpoint of Review

DMEPA communicated our findings to the Division of Pulmonary, Allergy and Rheumatology Products (DPARP) via e-mail on May 24, 2016. At that time we also requested additional information or concerns that could inform our review. Per e-mail correspondence from the DPARP on May 31, 2016, they stated no additional concerns with the proposed proprietary name, Kevzara.

3 CONCLUSIONS

The proposed proprietary name is acceptable.

If you have any questions or need clarifications, please contact Neil Vora, OSE project manager, at 240-402-4845.

3.1 COMMENTS TO THE APPLICANT

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

If any of the proposed product characteristics as stated in your March 16, 2016 submission are altered prior to approval of the marketing application, the name must be resubmitted for review.

APPEARS THIS WAY ON ORIGINAL

4 REFERENCES

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

USAN Stems List contains all the recognized USAN stems.

2. **Phonetic and Orthographic Computer Analysis (POCA)**

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

Drugs@FDA

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

RxNorm

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

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

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

Division of Medication Errors Prevention and Analysis proprietary name consultation requests

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

3. **Electronic Drug Registration and Listing System (eDRLS) database**

The electronic Drug Registration and Listing System (eDRLS) was established to support the FDA's Center for Drug Evaluation and Research (CDER) goal to establish a common Structured Product Labeling (SPL) repository for all facilities that manufacture regulated drugs. The system is a reliable, up-to-date inventory of FDA-regulated, drugs and establishments that produce drugs and their associated information.

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.³

³ 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 medical and/or coined abbreviations in the proprietary name?
	Proprietary names should not incorporate medical abbreviations (e.g., QD, BID, or others commonly used for prescription communication) or coined abbreviations that have no established meaning.
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 50% threshold in POCA. DMEPA reviews the combined orthographic and phonetic matches and group the names into one of the following three categories:
- Highly similar pair: combined match percentage score $\geq 70\%$.
 - Moderately similar pair: combined match percentage score $\geq 50\%$ to $\leq 69\%$.
 - Low similarity: combined match percentage score $\leq 49\%$.

Using the criteria outlined in the check list (Table 3-5) that corresponds to each of the three categories (highly similar pair, moderately similar pair, and low similarity), DMEPA evaluates the name pairs to determine the acceptability or non-acceptability of a proposed proprietary name. 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 with overlapping or similar strengths or doses represent an area for concern for FDA. The dosage and strength information is often located in close proximity to the drug name itself on prescriptions and medication orders, and it 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, etc.) may be limited when the strength or dose overlaps. We review 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.

- 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 $\geq 70\%$).

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 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 $\geq 50\%$ to $\leq 69\%$).

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

	Orthographic Checklist (Y/N to each question)	Phonetic Checklist (Y/N to each question)
	<ul style="list-style-type: none"> • 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 <i>z</i> and <i>f</i>), is there a different number or placement of upstroke/downstroke letters present in the names? • Is there different number or placement of cross-stroke or dotted letters present in the names? • Do the infixes of the name appear dissimilar when scripted? • Do the suffixes of the names appear dissimilar when scripted? 	<ul style="list-style-type: none"> • Do the names have different number of syllables? • Do the names have different syllabic stresses? • Do the syllables have different phonologic processes, such as vowel reduction, assimilation, or deletion? • Across a range of dialects, are the names consistently pronounced differently?

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

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

Appendix B: Prescription Simulation Samples and Results

Figure 1. Kevzara Study (Conducted on April 4, 2016)

Handwritten Requisition Medication Order	Verbal Prescription
<p><u>Medication Order:</u> <i>Kevzara 150mg subcutaneous q 2 weeks</i></p>	<p>Kevzara 200 mg sq q 2wks</p> <p>#2</p>
<p><u>Outpatient Prescription:</u> <i>Kevzara 200mg SQ q 2wks # 2</i></p>	

FDA Prescription Simulation Responses (Aggregate 1 Rx Studies Report)

286 People Received Study

100 People Responded

Study Name: Kevzara

Total	33	32	35	TO
INTERPRETATION	OUTPATIENT	VOICE	INPATIENT	
CAVZARRA	0	1	0	1
KADZARA	0	1	0	1
KATZARA	0	1	0	1
KAZARA	0	1	0	1
KEBZARA	0	1	0	1
KEBZORA	0	0	1	1
KEFSARA	0	1	0	1
KEFZARA	0	5	0	5
KEFZARA INJECTION	0	1	0	1
KEOZARA	0	0	8	8
KEOZARO	0	0	3	3
KEOZERA	0	0	1	1
KEOZORA	0	0	2	2
KEPHZARA	0	1	0	1
KEPSARA	0	1	0	1
KEPZARA	0	2	0	2
KERZAIN	7	0	0	7

KERZAM	5	0	0	5
KERZARA	1	0	0	1
KETZARA	0	1	0	1
KEUZARA	0	0	1	1
KEUZORA	0	0	1	1
KEVSAM	1	0	0	1
KEVZAIN	9	0	0	9
KEVZAM	8	0	0	8
KEVZARA	0	13	10	23
KEVZARO	0	0	2	2
KEVZAUN	1	0	0	1
KEVZAVN	1	0	0	1
KEVZERO	0	0	1	1
KEVZORA	0	0	2	2
KEZARA	0	2	0	2
KLOZARA	0	0	2	2
KLOZORA	0	0	1	1

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

No.	Proposed name: Kevzara Established name: sarilumab Dosage form: Injection Strength(s): 150 mg/1.14 mL, 200 mg/1.14 mL Usual Dose: 200 mg every other week. In liver impairment- 150 mg every other week	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.	Kevzara***	100	This name is the subject of this review.

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

No.	Name	POCA Score (%)
1.	Servira	61
2.	Covera	59
3.	Kadcyla	58
4.	Kava Root	58
5.	Cardura	58
6.	Kefzol	57
7.	Femara	56
8.	Kcentra	56
9.	Stelara	55
10.	Decara	54
11.	Kelferon	52
12.	Khedezla	52
13.	Climara	50
14.	Kepvance	50

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

No.	Proposed name: Kevzara Established name: sarilumab Dosage form: Injection Strength(s): 150 mg/1.14 mL, 200 mg/1.14 mL Usual Dose: 200 mg every other week. In liver impairment- 150 mg every other week	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) ***	61	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
2.	Gemzar	58	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different and Gemzar contains one less syllable.
3.	Keppra	58	The infixes of this name pair have sufficient orthographic differences. The second syllables of this name pair sound different and Keppra contains one less syllable.
4.	Ketalar	58	The infixes and suffixes of this name pair have sufficient orthographic differences. The second and third syllables of this name pair sound different.
5.	Silvera	58	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
6.	Teflaro	57	The prefixes and infixes of this name pair have sufficient orthographic differences. The first and second syllables of this name pair sound different.

No.	Proposed name: Kevzara Established name: sarilumab Dosage form: Injection Strength(s): 150 mg/1.14 mL, 200 mg/1.14 mL Usual Dose: 200 mg every other week. In liver impairment- 150 mg every other week	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
7.	Kaletra	56	The infixes of this name pair have sufficient orthographic differences. The second and third syllables of this name pair sound different.
8.	Kera-42	56	The suffixes of this name pair have sufficient orthographic differences. The third syllables of this name pair sound different.
9.	Keralac	56	The suffixes of this name pair have sufficient orthographic differences. The second and third syllables of this name pair sound different.
10.	Kerasal	56	The suffixes of this name pair have sufficient orthographic differences. The third syllables of this name pair sound different.
11.	Kelnor	54	The infixes and suffixes of this name pair have sufficient orthographic differences. The second syllables of this name pair sound different and Kelnor contains one less syllable.
12.	(b) (4) ***	54	The infixes and suffixes of this name pair have sufficient orthographic differences. The second and third syllables of this name pair sound different.
13.	Trivora	54	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
14.	Trivora-21	54	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.

No.	Proposed name: Kevzara Established name: sarilumab Dosage form: Injection Strength(s): 150 mg/1.14 mL, 200 mg/1.14 mL Usual Dose: 200 mg every other week. In liver impairment- 150 mg every other week	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
15.	Trivora-28	54	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
16.	Levora	53	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
17.	Levora 0.15/30-21	53	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
18.	Levora 0.15/30-28	53	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
19.	Aldara	52	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
20.	Kemstro	52	The suffixes of this name pair have sufficient orthographic differences. The second syllables of this name pair sound different and Kemstro contains one less syllable.
21.	Kerasal Al	52	The suffixes of this name pair have sufficient orthographic differences. The third syllables of this name pair sound different.
22.	Kovia	52	The lengths of the names differ by two letters. The infixes of this name pair have sufficient orthographic differences. The second syllables of this name pair sound different.

No.	Proposed name: Kevzara Established name: sarilumab Dosage form: Injection Strength(s): 150 mg/1.14 mL, 200 mg/1.14 mL Usual Dose: 200 mg every other week. In liver impairment- 150 mg every other week	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
23.	Arzerra	52	The prefixes of this name pair have sufficient orthographic differences. The first syllables of this name pair sound different.
24.	Kariva	50	The infixes of this name pair have sufficient orthographic differences. The second syllables of this name pair sound different.
25.	Kera Nail	50	The suffixes of this name pair have sufficient orthographic differences. The third syllables of this name pair sound different.
26.	(b) (4) ***	50	The prefixes, infixes, and suffixes of this name pair have sufficient orthographic differences. The first, second, and third syllables of this name pair sound different.
27.	Zyclara	50	The prefixes and infixes of this name pair have sufficient orthographic differences. The first and second syllables of this name pair sound different.

Appendix F: Low Similarity Names (e.g., combined POCA score is $\leq 49\%$)

No.	Name	POCA Score (%)
1.	Keflex	39

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

No.	Name	POCA Score (%)	Failure preventions
1.	Ketazolam	51	This is an international drug product.
2.	Kefadol	50	This is an international drug product.

Appendix H: Names not likely to be confused due to notable spelling, orthographic and phonetic differences.

No.	Name	POCA Score (%)
1.	Stavzor	58
2.	Hepsera	56
3.	Prevnar	56
4.	Prevnar 13	56
5.	Jevtana	55
6.	Salkera	54
7.	Qapzola	53
8.	(b) (4)	52
9.	(b) (4)	52
10.	Fentora	52
11.	Feverall	52
12.	Quflora	52
13.	(b) (4)	52
14.	Vestura	52
15.	Pevaryl	51

No.	Name	POCA Score (%)
16.	Tempra	51
17.	Tempra 1	51
18.	Tempra 2	51
19.	Tempra 3	51
20.	(b) (4)	50
21.	Clofera	50
22.	Dermasarra	50
23.	Levitra	50
24.	Provera	50
25.	(b) (4)	50
26.	Septra	50
27.	Stendra	50
28.	Sub Zero	50
29.	Tazorac	50

Appendix I: Names identified in the eDRLS database not likely to be confused due to notable spelling, orthographic and phonetic differences.

No.	Name
1.	N/A

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

/s/

TERESA S MCMILLAN
06/02/2016

MISHALE P MISTRY
06/02/2016

LUBNA A MERCHANT
06/02/2016

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: December 18, 2015
Application Type and Number: BLA 761037
Product Name and Strength: (b) (4) (sarilumab)
Injection
150 mg and 200 mg
Product Type: Combination Product
Rx or OTC: Rx
Applicant/Sponsor Name: Sanofi
Panorama #: 2015-1938621
DMEPA Primary Reviewer: Teresa McMillan, PharmD
DMEPA Team Leader: Kendra Worthy, PharmD
DMEPA Deputy Director: Lubna Merchant, MS, PharmD

2 Page(s) has been Withheld in Full as b4 (CCI/TS) immediately following this page

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

/s/

TERESA S MCMILLAN
12/18/2015

KENDRA C WORTHY
12/18/2015

LUBNA A MERCHANT
12/18/2015