CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

761349Orig1s000

PROPRIETARY NAME REVIEW(S)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Food and Drug Administration
Center for Drug Evaluation and Research

Memorandum

From:

Carlos M Mena-Grillasca, BS Pharm
Biologics Suffix Specialist, DMAMES
Office of Medication Error Prevention and Risk Management
Office of Surveillance and Epidemiology
Center for Drug Evaluation and Research

Carlos Mena-grillasca -S
Digitally signed by Carlos Mena-grillasca -S
Date: 2023.08.21 12:46:53 -04'00'

Through:

Irene Z Chan, PharmD, BCPS
Deputy Director
Office of Medication Error Prevention and Risk Management
Office of Surveillance and Epidemiology
Center for Drug Evaluation and Research

Irene Z. Chan -S
Digitally signed by Irene Z. Chan -S
Date: 2023.08.21 17:26:47 -04'00'

Gerald Dal Pan, MD, MHS
Director, Office of Surveillance and Epidemiology
Center for Drug Evaluation and Research

Gerald J. Dal Pan -S
Digitally signed by Gerald J. Dal Pan -S
Date: 2023.08.22 10:13:15 -04'00'

Subject: Evaluation of the nonproprietary name for BLA 761349

Novartis Pharmaceuticals Corporation (Novartis) submitted a new Biologics License Application (BLA 761349) pursuant to Section 351(a) of the Public Health Service Act, for a new formulation of a currently approved biological product: Cosentyx (secukinumab) (BLA 125504). Novartis is the license holder for BLA 125504 and the applicant for BLA 761349.

Cosentyx (secukinumab) is a human interleukin-17A antagonist and is currently approved for subcutaneous injection for the treatment of patients with Plaque Psoriasis, Psoriatic Arthritis, Ankylosing Spondylitis, Non-Radiographic Axial Spondyloarthritis, and Enthesitis-Related Arthritis. Cosentyx is currently supplied as single-dose prefilled syringes (75 mg/0.5 mL, 150 mg/mL, and 300 mg/2 mL) and single-dose pens (150 mg/mL and 300 mg/2 mL).

The new formulation in BLA 761349 contains the same drug substance (secukinumab) formulated at a strength of 125 mg/5 mL in a single-dose vial, intended for the same indications of Psoriatic Arthritis, Ankylosing Spondylitis, and Non-Radiographic Axial Spondyloarthritis (not for Plaque Psoriasis and Enthesitis-Related Arthritis), and dosage form (injection). The new formulation is for intravenous administration after dilution. See Appendix 1 - Product Characteristics Comparison Table for more information.

The secukinumab drug substance (DS) process used in the manufacture of the proposed vial presentation is similar to the drug substance process used during the manufacture of the approved pre-filled syringe and pen presentations. In fact, the new marketing application (BLA 761349) for the proposed intravenous formulation cross refences the DS section of the original BLA 125504.

Under FDA's prescription drug user fee bundling policy, different formulations should be submitted in separate original applications unless the products are quantitatively and qualitatively identical (drugs) or alike (biological products) in composition[a]. In addition, under the bundling policy, two different indications and routes of administration can be included under a single BLA.

FDA issued a final guidance entitled Nonproprietary Naming of Biological Products on January 13, 2017, stating the Agency's intention to designate proper names that include four-letter

[a] Guidance for Industry, Submitting Separate Marketing Applications and Clinical Data for Purposes of Assessing User Fees (Dec. 2004), available at https://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM079320.pdf

distinguishing suffixes for biological products[b]. This 351(a) application (BLA 761349) is within the scope of this naming guidance.

The currently approved formulation for Novartis' BLA 125504 is also within the scope of the naming guidance. However, a draft updated guidance, issued in March 2019, addresses nonproprietary names of biological products licensed under section 351(a) that do not include an FDA-designated suffix[c]. The updated guidance, if finalized, will explain that FDA does not expect the nonproprietary names of such products to be revised in order to accomplish the objectives of the naming convention described in the January 2017 final guidance for industry.

We carefully considered whether the nonproprietary name of the new proposed formulation in BLA 761349 should include a suffix or whether the proper name considerations for this product warrant departing from the January 2017 final guidance. Among the factors we have considered are the following:

1. The drug substance (DS) in the approved formulation (BLA 125504) and the proposed formulation (BLA 761349) are essentially unchanged with respect to product quality attributes (identity, purity, etc.). The main difference between the formulations is a new strength (125 mg/5 mL) in a vial presentation intended for intravenous administration after dilution.
2. The drug substance in BLA 761349 is the same as the drug substance in BLA 125504. In fact, BLA 761349 references the DS section of original BLA 125504.
3. Considering that BLA 125504 and BLA 761349 share the same drug substance and the formulation similarities, no significant differences in immunogenicity profiles is expected.
4. We note that all other product characteristics are the same or similar: indications (Plaque Psoriasis, Psoriatic Arthritis, Ankylosing Spondylitis, Non-Radiographic Axial Spondyloarthritis, and Enthesitis-Related Arthritis vs. Psoriatic Arthritis, Ankylosing Spondylitis, and Non-Radiographic Axial Spondyloarthritis), dosage form (injection), and frequency of administration (Weeks 0, 1, 2, 3, 4 and every 4 weeks thereafter vs. Week 0 and every 4 weeks thereafter). See Appendix 1.
5. As noted above, the proposed BLA 761349 could have been managed under a supplement to the current BLA 125504, which would not have resulted in a change to the proper name under the approach to nonproprietary naming described in the final guidance.
6. Novartis is proposing to have a single U.S. prescribing information (USPI) for both products (BLA 125504 and BLA 761349) and the same proprietary name (Cosentyx). The naming

[b] Available at https://www.fda.gov/downloads/drugs/guidances/ucm459987.pdf (hereafter "naming guidance").

[c] Available at https://www.fda.gov/media/121316/download

convention of using the same proprietary name for different indications, different formulations or route of administration is not uncommon and has been found acceptable. DMEPA 1 found the proposed name Cosentyx conditionally acceptable for BLA 761349[d].

As noted in the final Nonproprietary Naming of Biological Products guidance, distinguishing nonproprietary names will facilitate pharmacovigilance when other means to track a specific dispensed product are not readily accessible or available; facilitate accurate identification of these biological products by health care practitioners and patients; and help prevent inadvertent substitution that may lead to medication errors. As the guidance explains, a distinguishing suffix supports the tracking of product-specific events over time, our ability to track adverse events to a specific manufacturer (and as appropriate, to a manufacturing lot or manufacturing site for a particular biological product), and our ability to detect safety signals throughout the life cycle of a product so that the Agency and the manufacturer can act swiftly and in a targeted manner to identify and address a problem. As noted above, the drug substance proposed in this submission, secukinumab, is essentially unchanged with respect to product quality attributes. Also, as noted above, Novartis is the applicant for both BLA 125504 and BLA 761349.

Given the above factors, a different nonproprietary name for BLA 761349 would not be designated in this particular case. The addition of a suffix to the nonproprietary name for BLA 761349 could create confusion and would not further the goals of the naming convention.

This memorandum documents the justification for and supervisory concurrence with the decision to depart from the recommendations in the January 2017 final Nonproprietary Naming of Biological Products guidance in approving the same nonproprietary name for BLA 761349[e]. Therefore, secukinumab will be the proper name designated in the license for BLA 761349. We based this determination upon consideration of all the factors outlined above. If any of the factors enumerated above were to change, we may reconsider the appropriate proper name for this BLA.

---

[d] McMillan, T. Proprietary Name Review for Cosentyx (IND 012678 and BLA 761349). Silver Spring (MD): FDA, CDER, OSE, DMEPA 1 (US); 2023 Mar 07. Nexus PNR ID No. 2022-1044724873

[e] See 21 C.F.R. § 10.115(d)(3) "Although guidance documents do not legally bind FDA, they represent the agency's current thinking. Therefore, FDA employees may depart from guidance documents only with appropriate justification and supervisory concurrence."

Appendix 1

<table>
<tr><th></th><th>Cosentyx (BLA 761349)
Under Review</th><th>Cosentyx (BLA 125504) –
Approved January 21, 2015</th></tr>
<tr><td>Nonproprietary Name</td><td colspan="2">secukinumab</td></tr>
<tr><td>Indication of Use</td><td colspan="2">• moderate to severe plaque psoriasis in patients 6 years and older who are candidates for systemic therapy or phototherapy
• active psoriatic arthritis (PsA) in patients 2 years of age and older
• adults with active ankylosing spondylitis (AS)
• adults with active non-radiographic axial spondyloarthritis (nr-axSpA) with objective signs of inflammation
• active enthesitis-related arthritis (ERA) in patients 4 years of age and older</td></tr>
<tr><td>Route of Administration</td><td>Intravenous</td><td>Subcutaneous</td></tr>
<tr><td>Dosage Form</td><td>Injection</td><td>Injection</td></tr>
<tr><td>Strengths</td><td>125 mg/5 mL (25 mg/mL)</td><td>• 300 mg/2 mL (150 mg/mL) (single-dose pen, single-dose prefilled syringe)
• 150 mg/mL (single-dose pen, single-dose prefilled syringe)
• 75 mg/0.5 mL single-dose prefilled syringe</td></tr>
<tr><td>Dose and Frequency</td><td>Psoriatic Arthritis:
Recommended Adult Intravenous Dosage: The recommended intravenous dosage regimen is 6 mg/kg given at Week 0 as a loading dose, followed by 1.75 mg/kg every 4 weeks thereafter.
Total doses exceeding 300 mg per infusion are not recommended for the 1.75 mg/kg maintenance dose in patients with PsA.

Ankylosing Spondylitis:
Recommended Intravenous Dosage (proposed)
The recommended intravenous dosage regimen is 6 mg/kg given at Week 0 as</td><td>Plaque Psoriasis:
• Adults: Recommended dosage is 300 mg by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 followed by 300 mg every 4 weeks. For some patients, a dose of 150 mg may be acceptable.
• Pediatric Patients 6 Years and Older: Recommended dosage based on body weight and administered by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter:
<table>
<tr><th>Body Weight at Time of Dosing</th><th>Recommended Dose</th></tr>
<tr><td>Less than 50 kg</td><td>75 mg</td></tr>
<tr><td>Greater than or equal to 50 kg</td><td>150 mg</td></tr>
</table></td></tr>
</table>

	a loading dose, followed by 1.75 mg/kg every 4 weeks thereafter. Total doses exceeding 300 mg per infusion are not recommended for the 1.75 mg/kg maintenance dose in patients with AS. *Non-Radiographic Axial Spondyloarthritis:* Recommended Intravenous Dosage (proposed) The recommended intravenous dosage regimen is 6 mg/kg given at Week 0 as a loading dose, followed by 1.75 mg/kg every 4 weeks thereafter. Total doses exceeding 300 mg per infusion are not recommended for the 1.75 mg/kg maintenance dose in patients with nr-axSpA. Administration of Intravenous Formulation COSENTYX solution in vial requires dilution prior to administration. Administer as an intravenous infusion over a period of 30 minutes. (b) (4) (b) (4)	*Psoriatic Arthritis*: Recommended Adult Subcutaneous Dosages: • For PsA patients with coexistent moderate to severe plaque psoriasis, use the dosage and administration for plaque psoriasis. • For other PsA patients, administer with or without a loading dosage. o With a loading dosage: 150 mg at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter o Without a loading dosage: 150 mg every 4 weeks o If a patient continues to have active PsA, consider a dosage of 300 mg every 4 weeks. Recommended Pediatric Subcutaneous Dosages: Patients 2 years and older, administer by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter. • For patients weighing ≥ 15 kg and < 50 kg the dose is 75 mg. • For patients weighing ≥ 50 kg the dose is 150 mg. *Ankylosing Spondylitis:* Recommended Subcutaneous Dosage Regimen: Administer with or without a loading dosage. The recommended dosages are: • With a loading dosage: 150 mg at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter. • Without a loading dosage: 150 mg every 4 weeks. • If a patient continues to have active ankylosing spondylitis, consider a dosage of 300 mg every 4 weeks. *Non-Radiographic Axial Spondyloarthritis:* Recommended Subcutaneous Dosage Administer with or without a loading dosage. The recommended dosage is:

		• With a loading dosage: 150 mg at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter. • Without a loading dosage: 150 mg every 4 weeks. *Enthesitis-Related Arthritis*: Recommended dosage is administered by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter. • For patients weighing ≥ 15 kg and < 50 kg, the dose is 75 mg. • For patients weighing ≥ 50 kg, the dose is 150 mg.
How Supplied	COSENTYX vial: (proposed) • Carton containing one 125 mg/5 mL (25 mg/mL) solution in a single-dose vial for dilution prior to intravenous infusion.	COSENTYX Sensoready pen: • Carton of two 150 mg/mL (300 mg dose) single-dose Sensoready pens (injection) • Carton of one 150 mg/mL single-dose Sensoready pen (injection) COSENTYX prefilled syringe: • Carton of two 150 mg/mL (300 mg dose) single-dose prefilled syringes (injection) • Carton of one 150 mg/mL single-dose prefilled syringe (injection) COSENTYX prefilled syringe (for pediatric patients less than 50 kg): • Carton of one 75 mg/0.5 mL single-dose prefilled syringe (injection)
Storage	Refrigerate vial at 2°C to 8°C (36°F to 46°F).	Refrigerate Sensoready pens and prefilled syringes at 2°C to 8°C (36°F to 46°F). If necessary, Sensoready pens and 150 mg/mL prefilled syringes may be stored for up to 4 days at room temperature not to exceed 30° C (86° F).

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/

IRENE Z CHAN
08/25/2023 01:02:50 PM

PROPRIETARY NAME RECONSIDERATION 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:	March 7, 2023
Application Type and Number:	IND 012678 and BLA 761349
Product Name and Strength:	Cosentyx (secukinumab) Injection, 125 mg/5 mL (25 mg/mL)
Product Type:	Single Ingredient Product
Rx or OTC:	Prescription (Rx)
Applicant/Sponsor Name:	Novartis
PNR ID #:	2022-1044724873
DMEPA 1 Safety Evaluator:	Teresa McMillan, PharmD
DMEPA 1 Team Leader:	Idalia Rychlik, PharmD
DMEPA 1 Director:	Mishale Mistry, PharmD

Contents

1 INTRODUCTION

This review responds to a December 7, 2022 request from Novartis to reconsider the proposed proprietary name, Cosentyx. The sources and methods used to evaluate the proposed proprietary name are outlined in the reference section and Appendix A respectively. Novartis did not submit an external name study for this proposed proprietary name.

1.1 REGULATORY HISTORY

The proprietary name Cosentyx was originally approved under BLA 125504 on January 21, 2015 as an injection formulation for subcutaneous administration in a 150 mg/mL single-use pen, 150 mg/mL single-use prefilled syringe, and 150 mg lyophilized powder in a single-use vial for reconstitution for healthcare provider use only.

Novartis previously submitted the proposed proprietary name, Cosentyx, on March 23, 2021, under IND 012678 for a proposed intravenous vial formulation. However, on September 17, 2021, we found the name, Cosentyx, unacceptable due to the proposed intravenous vial formulation sharing overlapping product characteristics with the approved subcutaneous lyophilized powder for reconstitution vial formulation.[a]

On February 25, 2022, Novartis submitted BLA 125504/S-055 which proposed to remove the lyophilized powder vial formulation from the USPI and to remove all pertinent text related to the lyophilized powder in the USPI, Medication Guide, and Instructions for Use.

Following the unacceptable decision for the proposed proprietary name, Cosentyx. Novartis submitted this request for proposed proprietary name reconsideration under IND 012678 on April 26, 2022 and under BLA 761349 on December 7, 2022.

1.2 PRODUCT INFORMATION

The following product information is provided in the proprietary name submission received on December 7, 2022.

[a] McMillan, T. Proprietary Name Review for Cosentyx (IND 012678). Silver Spring (MD): FDA, CDER, OSE, DMEPA 1 (US); 2021 SEP 17. PNR ID No. 2021-1044723885.

<table>
<tr><th></th><th>Cosentyx (BLA 761349) – proposed</th><th>Cosentyx (BLA 125504) – Approved January 21, 2015</th></tr>
<tr><td>Intended Pronunciation</td><td colspan="2">koe sen’ tix</td></tr>
<tr><td>Nonproprietary Name</td><td colspan="2">secukinumab</td></tr>
<tr><td>Indication of Use</td><td colspan="2">• moderate to severe plaque psoriasis in patients 6 years and older who are candidates for systemic therapy or phototherapy
• active psoriatic arthritis (PsA) in patients 2 years of age and older
• adults with active ankylosing spondylitis (AS)
• adults with active non-radiographic axial spondyloarthritis (nr-axSpA) with objective signs of inflammation
• active enthesitis-related arthritis (ERA) in patients 4 years of age and older</td></tr>
<tr><td>Route of Administration</td><td>Intravenous</td><td>Subcutaneous</td></tr>
<tr><td>Dosage Form</td><td>Injection</td><td>Injection
Lyophilized powder for injection</td></tr>
<tr><td>Strengths</td><td>125 mg/5 mL (25 mg/mL)</td><td>• 150 mg/mL (single-dose pen, single-dose prefilled syringe)
• 75 mg/mL single-dose prefilled syringe
• 150 mg lyophilized powder for reconstitution (healthcare professional use only)</td></tr>
<tr><td>Dose and Frequency</td><td><u>Psoriatic Arthritis</u>:

Recommended Adult Intravenous Dosage: The recommended intravenous dosage regimen is 6 mg/kg given at Week 0 as a loading dose, followed by 1.75 mg/kg every 4 weeks thereafter.

Total doses exceeding 300 mg per infusion are not recommended for the 1.75 mg/kg maintenance dose in patients with PsA.

<u>Ankylosing Spondylitis:</u>

Recommended Intravenous Dosage (proposed)

The recommended intravenous dosage regimen is 6 mg/kg given at Week 0 as a loading dose,</td><td><u>Plaque Psoriasis:</u>

• Adults: Recommended dosage is 300 mg by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 followed by 300 mg every 4 weeks. For some patients, a dose of 150 mg may be acceptable.

• Pediatric Patients 6 Years and Older: Recommended dosage based on body weight and administered by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter:
<table><tr><th>Body Weight at Time of Dosing</th><th>Recommended Dose</th></tr><tr><td>Less than 50 kg</td><td>75 mg</td></tr><tr><td>Greater than or equal to 50 kg</td><td>150 mg</td></tr></table>
<u>Psoriatic Arthritis</u>:

Recommended Adult Subcutaneous Dosages:</td></tr>
</table>

	followed by 1.75 mg/kg every 4 weeks thereafter.
	
	Total doses exceeding 300 mg per infusion are not recommended for the 1.75 mg/kg maintenance dose in patients with AS.
	
	Non-Radiographic Axial Spondyloarthritis:
	
	Recommended Intravenous Dosage (proposed)
	
	The recommended intravenous dosage regimen is 6 mg/kg given at Week 0 as a loading dose, followed by 1.75 mg/kg every 4 weeks thereafter.
	
	Total doses exceeding 300 mg per infusion are not recommended for the 1.75 mg/kg maintenance dose in patients with nr-axSpA.
	
	Administration of Intravenous Formulation COSENTYX solution in vial requires dilution prior to administration. Administer as an intravenous infusion over a period of 30 minutes. (b) (4) (b) (4)
		• For PsA patients with coexistent moderate to severe plaque psoriasis, use the dosage and administration for plaque psoriasis.
		• For other PsA patients, administer with or without a loading dosage.
		  ○ With a loading dosage: 150 mg at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter
		  ○ Without a loading dosage: 150 mg every 4 weeks
		  ○ If a patient continues to have active PsA, consider a dosage of 300 mg every 4 weeks.
		
		Recommended Pediatric Subcutaneous Dosages: Patients 2 years and older, administer by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter.
		• For patients weighing ≥ 15 kg and < 50 kg the dose is 75 mg.
		• For patients weighing ≥ 50 kg the dose is 150 mg.
		
		Ankylosing Spondylitis:
		
		Recommended Subcutaneous Dosage Regimen:
		
		Administer with or without a loading dosage.
		
		The recommended dosages are:
		
		• With a loading dosage: 150 mg at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter.
		• Without a loading dosage: 150 mg every 4 weeks.
		• If a patient continues to have active ankylosing spondylitis, consider a dosage of 300 mg every 4 weeks.
		
		Non-Radiographic Axial Spondyloarthritis:
		
		Recommended Subcutaneous Dosage
		
		Administer with or without a loading dosage. The recommended dosage is:

		• With a loading dosage: 150 mg at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter. • Without a loading dosage: 150 mg every 4 weeks. ***Enthesitis-Related Arthritis*:** Recommended dosage is administered by subcutaneous injection at Weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter. • For patients weighing ≥ 15 kg and < 50 kg, the dose is 75 mg. • For patients weighing ≥ 50 kg, the dose is 150 mg.
How Supplied	COSENTYX vial: (proposed) • NDC 0078-xxxx-xx: Carton containing one 125 mg/5 mL (25 mg/mL) solution in a single-dose vial for dilution prior to intravenous infusion.	COSENTYX (secukinumab) injection is a clear to opalescent, colorless to slightly yellowish solution available as follows: COSENTYX Sensoready pen: • NDC 0078-0639-41: Carton of two 150 mg/mL (300 mg dose) single-dose Sensoready pens (injection) • NDC 0078-0639-68: Carton of one 150 mg/mL single-dose Sensoready pen (injection) COSENTYX prefilled syringe: • NDC 0078-0639-98: Carton of two 150 mg/mL (300 mg dose) single-dose prefilled syringes (injection) • NDC 0078-0639-97: Carton of one 150 mg/mL single-dose prefilled syringe (injection) COSENTYX prefilled syringe (for pediatric patients less than 50 kg): • NDC 0078-1056-97: Carton of one 75 mg/0.5 mL single-dose prefilled syringe (injection) The removable cap of the COSENTYX 150 mg/mL Sensoready pen and prefilled syringe, and 75 mg/0.5 mL prefilled syringe contains natural rubber latex. Each Sensoready pen and prefilled syringe is equipped with a needle safety guard.

		COSENTYX (secukinumab) for injection is a white lyophilized powder for healthcare professional use only available as follows: • NDC 0078-0657-61: Carton of one 150 mg lyophilized powder in a single-dose vial (for injection)
Storage	Refrigerate COSENTYX vial at 2ºC to 8ºC (36ºF to 46ºF). Keep the product in the original carton to protect from light until the time of use. Do not freeze. To avoid foaming do not shake. COSENTYX does not contain a preservative; discard any unused portion.	Refrigerate COSENTYX Sensoready pens, prefilled syringes, and vial at 2ºC to 8ºC (36ºF to 46ºF). Keep the product in the original carton to protect from light until the time of use. Do not freeze. To avoid foaming do not shake. COSENTYX does not contain a preservative; discard any unused portion. If necessary, COSENTYX Sensoready pens and 150 mg/mL prefilled syringes may be stored for up to 4 days at room temperature not to exceed 30°C (86°F). Write the date COSENTYX was removed from the refrigerator in the space provided on the carton. If unused and not stored above 30°C (86°F), COSENTYX Sensoready pens and 150 mg/mL prefilled syringes may be returned to the refrigerator. Throw away COSENTYX if it has been kept outside of the refrigerator and not been used in over 4 days.

1.3 RECONSIDERATION RATIONALE FROM NOVARTIS

In the December 7, 2022 request for reconsideration, Novartis stated to address the concerns raised in the September 17, 2021 letter from the Agency they would implement the following:

- [redacted] (b) (4)
- Note that the lyophilized powder vial presentation has never been marketed in the United States [redacted] (b) (4)
- There are no outstanding vials on the market, and the only presentation currently utilized in the US are the Sensoready pen and prefilled syringe.
- Since all other approved presentations (i.e. the Sensoready pen and prefilled syringe) will remain on the market, there is no expectation that the [redacted] (b) (4) (b) (4)
- Remove the lyophilized powder formulation from the USPI and all pertinent text related to the lyophilized powder in the USPI, Medication Guide, and Instructions for Use
- Novartis submitted BLA 125504/S-055 on February 25, 2022 which proposed to remove the lyophilized powder vial formulation from the USPI and to remove all pertinent text related to the lyophilized powder in the USPI, Medication Guide, and Instructions for Use. In addition, Novartis proposed to remove the artwork from Module 1.14.1.1.
-

2 RESULTS

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

2.1 MISBRANDING ASSESSMENT

The Office of Prescription Drug Promotion (OPDP) determined that Cosentyx would not misbrand the proposed product. The Division of Medication Error Prevention and Analysis 1 (DMEPA 1) concurred with the findings of OPDP's assessment for Cosentyx. The Division of Rheumatology and Transplant Medicine (DRTM) did not comment on the findings of OPDP's assessment for Cosentyx.

2.2 SAFETY ASSESSMENT

The following aspects were reconsidered in the safety evaluation of the proposed proprietary name, Cosentyx.

2.2.1 United States Adopted Names (USAN) Search

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

2.2.2 Components of the Proposed Proprietary Name

Novartis did not provide a derivation or intended meaning for the proposed proprietary name, Cosentyx, 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 can contribute to medication error.

2.2.3 Comments from Other Review Disciplines at Initial Review

On December 16, 2022, the Division of Rheumatology and Transplant Medicine (DRTM) did not forward any comments or concerns relating to Cosentyx at the initial phase of the review.

2.3 EVALUATION OF RECONSIDERATION RATIONALE FROM NOVARTIS

We used Failure Mode and Effects Analysis (FMEA) in our review of Novartis' request for reconsideration. We also considered the safety concerns described in our previous review of the proposed proprietary name, Cosentyx, as well as information provided by Novartis, in the request for reconsideration.

To mitigate the Agency's previous concerns regarding the risk of potential mix ups between the vial presentations, which would result in wrong preparation, wrong dose and wrong route of administration errors, Novartis has submitted BLA 125504/S-055 which proposes to remove the lyophilized powder vial formulation from the USPI and to remove all pertinent text related to the lyophilized powder in the USPI, Medication Guide, and Instructions for Use. As stated in Section 1.3, (b) (4) . Although Novartis'

[b] USAN stem search conducted on January 24, 2023.

proposal would partially mitigate our concerns, we note that the approval of BLA 125504/S-055 is still pending.

As previously communicated to Novartis, we note that both vial formulations have different preparations instructions and if marketed simultaneously, this may lead to preparation medication errors. We note that Novartis states that the currently approved subcutaneous vial formulation has never been marketed (b) (4) in the instance that Novartis does introduce the subcutaneous vial formulation on the market or text regarding the subcutaneous formulation remains in the labeling, we conferred with the Division of Rheumatology and Transplant Medicine (DRTM) regarding the clinical consequences if the subcutaneous and intravenous vial preparations were inadvertently confused. Per DRTM, if the proposed intravenous vial is prepared using the subcutaneous vial preparation instructions, the formulation would be further diluted, resulting in the patient receiving a slight underdose, which is not ideal but not a safety concern. Furthermore, it is also unlikely that the subcutaneous lyophilized vial formulation would be prepared using the proposed intravenous preparation instructions due to the nature of the preparation steps involved.

We also note that there are other subcutaneous Cosentyx presentations (i.e., prefilled syringe) that are available, which could pose additional medication error concerns, should the subcutaneous and intravenous formulations be confused. For example, we note that the subcutaneous prefilled syringe could be given as an intravenous push or the proposed intravenous vial formulation could be administered as a subcutaneous injection. Given the potential for confusion between the formulations and concerns raised under review of the proposed proprietary name under the IND, we conferred with the DRTM on administering this drug product via the wrong or unintended route. Per DRTM, "it is unlikely that there would be any clinical effects if the proposed intravenous product was mistakenly administered subcutaneously or the subcutaneous product was administered intravenously". In the instance that the subcutaneous prefilled syringe is administered as an intravenous bolus (e.g., intended dose is 150 mg administered intravenously, but the 150 mg/mL subcutaneous prefilled syringe is inadvertently selected and administered via intravenous bolus), "there is no safety concern" per DRTM. Furthermore, it is unlikely that the undiluted intravenous vial formulation is administered as a subcutaneous dose given the volume needed (e.g., a 150 mg subcutaneous dose would require administration of 6 mL of the intravenous formulation) and per DRTM, "it's not likely they can admit more than 2 mL with the subcutaneous route". DRTM specifically noted that "at this time we don't have concern for exposure matching between intravenous and subcutaneous for PsA and AS; [however] note that the review is still ongoing and the conclusion may change".

We also acknowledge that Novartis proposes text within the prescribing information and on the proposed carton labeling and container labels to help mitigate formulation mix-ups and/or wrong route of administration errors, and states that the intravenous vial formulation has to be further diluted prior to administration. The proposed prescribing information contains distinct preparation sections for each individual vial formulation. Additionally, we note that the carton labeling and container labels prominently indicate the route of administration.

Therefore, based on the available information at this time with input from DRTM on the clinical implications of wrong drug formulation/wrong route of administration/wrong preparation errors, we do not object to the proposed naming strategy re-using the Cosentyx name for the new intravenous formulation.

2.3.1 Communication of DMEPA's Determination

On March 7, 2023, DMEPA 1 communicated our reconsideration determination to the Division of Rheumatology and Transplant Medicine (DRTM).

3 CONCLUSION

The proposed proprietary name, Cosentyx, is acceptable upon reconsideration. If you have any questions or need clarifications, please contact Davis Matthew, OSE project manager, at 240-402-4559.

3.1 COMMENTS TO NOVARTIS

We have completed our review of the information submitted in your Request for Reconsideration of the proposed proprietary name, Cosentyx. In your Request, we note that you refer to BLA 125504/S-055, submitted on February 25, 2022, which proposes to remove the lyophilized powder vial formulation from the USPI and to remove all pertinent text related to the lyophilized powder in the USPI, Medication Guide, and Instructions for Use. We note that BLA 125504/S-55 is still pending and therefore the subcutaneous vial formulation remains in the approved label and labeling to date. Furthermore, we refer to the Division of Rheumatology and Transplant Medicine (DRTM) clinical team's previously expressed concerns on whether the intravenous doses would adequately match the exposures with the approved subcutaneous doses (refer to the Proprietary Name Advice Letter dated September 17, 2021 under IND 012678).

Based on the information available at this time from the DRTM clinical team regarding the clinical consequences of confusion between the proposed intravenous and subcutaneous formulations and pending the approval of BLA 125504/S-055, we have concluded that this name is conditionally acceptable.

If any of the proposed product characteristics as stated in your submission, received on December 7, 2022, are altered prior to approval of the marketing application, or new information becomes available with respect to the aforementioned clinical risk or BLA 125504/S-055 receives a Complete Response, 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.[c]

[c] 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[d]. 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

[d] 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. 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.

   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.

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/

TERESA S MCMILLAN
03/07/2023 03:42:54 PM

IDALIA E RYCHLIK
03/07/2023 04:00:46 PM

MISHALE P MISTRY
03/07/2023 04:20:52 PM