Department of Health and Human Services
Public Health Service
Food and Drug Administration
Center for Drug Evaluation and Research
Office of Surveillance and Epidemiology

Pediatric Postmarketing Pharmacovigilance Review

Date:	December 7, 2022
Medical Officers:	Ivone Kim, MD Division of Pharmacovigilance I (DPV I) LCDR Melissa Reyes, MD, MPH, DTMH DPV I
Team Leader:	Carmen Cheng, PharmD DPV I
Division Director:	Cindy Kortepeter, PharmD DPV I
Product Name:	Qbrexza (glycopyrronium) cloth, 2.4%
Pediatric Labeling Approval Date:	June 28, 2018
Application Type/Number:	NDA 210361
Applicant:	Journey
TTT ID #:	2022-252

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This review evaluates FDA Adverse Event Reporting System (FAERS) reports for Qbrexza (glycopyrronium) cloth, 2.4% in pediatric patients less than 18 years of age. The Division of Pharmacovigilance (DPV) conducted this review in accordance with the Pediatric Research Equity Act (PREA). This review focuses on serious unlabeled adverse events associated with topical glycopyrronium tosylate in pediatric patients.

The FDA approved Qbrexza (glycopyrronium) cloth, 2.4% on June 28, 2018, for the indication of topical treatment of primary axillary hyperhidrosis in adult and pediatric patients 9 years of age and older.

Our FAERS search retrieved 142 pediatric reports describing use of topical glycopyrronium tosylate (<18 years-old) through May 31, 2022, of which 115 were included in our series. Of the reports reviewed, there were no additional new safety signals identified, no increased severity or frequency of any labeled adverse events, and there were no deaths directly associated with Qbrexza. The majority of reports described adverse events that were likely due to concomitant medications (e.g., prochlorperazine), consistent with the known adverse reactions described in labeling (i.e., anticholinergic signs and symptoms), or had limited information that precluded a meaningful causality assessment.

DPV did not identify new pediatric safety concerns for Qbrexza at this time. DPV recommends no regulatory action at this time and will continue to monitor all adverse events associated with the use of Qbrexza.

1 INTRODUCTION

This review evaluates FDA Adverse Event Reporting System (FAERS) reports for Qbrexza (glycopyrronium) cloth, 2.4% in pediatric patients less than 18 years of age. The Division of Pharmacovigilance (DPV) conducted this review in accordance with the Pediatric Research Equity Act (PREA). This review focuses on serious unlabeled adverse events associated with Qbrexza (glycopyrronium) cloth, 2.4% in pediatric patients.

1.1 PEDIATRIC REGULATORY HISTORY

The FDA approved Qbrexza cloth, 2.4% on June 28, 2018, and it is indicated for topical treatment of primary axillary hyperhidrosis in adult and pediatric patients 9 years of age and older (FDA Division of Dermatology and Dentistry (DDD) 2018a, FDA DDD 2018b).

The initial safety and efficacy of Qbrexza cloth, 2.4% was assessed in two identically-designed, randomized, vehicle-controlled multicenter trials, Trial 1 (NCT02530281) and Trial 2 (NCT02530294), that were conducted in 697 subjects age 9 years or older with primary axillary hyperhidrosis. Trials 1 and 2 included 34 subjects age 9 to 17 years of age exposed to Qbrexza cloth, 2.4%. Prior to the start of treatment, all subjects showed production of at least 50 mg of sweat in each axilla over a 5-minute period and rated the severity of their sweating daily over a week with a mean score of 4 or higher on the Axillary Sweating Daily Diary (ASDD) item #2, a patient reported outcome instrument scored from 0 (no sweating) to 10 (worst possible sweating). Subjects were randomized to receive either Qbrexza or vehicle applied once daily to each axilla. The co-primary efficacy endpoints were the proportion of subjects having at least a 4-point improvement from baseline in the weekly mean ASDD item #2 score at Week 4 and the mean absolute change from baseline in gravimetrically measured sweat production at Week 4. The proportion of subjects reporting treatment success was greater for the Qbrexza cloth, 2.4% group compared to vehicle for both Trial 1 and 2. In terms of safety, the clinical reviewer concluded that the majority of adverse events observed with exposure to Qbrexza cloth, 2.4% "represent anticholinergic effects, consistent with the mechanism of action of glycopyrronium and local skin reactions…Most adverse reactions were mild or moderate in severity, and reversible upon discontinuation" (FDA DDD 2018b). In addition, a Phase 1 maximal use pharmacokinetic study enrolled subjects age 10 through 17 in a maximal use pharmacokinetic trial (n=20) exposed to Qbrexza cloth, 2.4% (FDA DDD 2018b).

Of note, the approval letter (FDA DDD 2018a) states:

> We are waiving the pediatric study requirement for ages 0 to less than 9 years because necessary studies are impossible or highly impracticable. This is because the number of patients is extremely small, as this condition generally, doesn't affect pre-pubertal patients.

Thus, the Applicant had "fulfilled the pediatric study requirement for ages 9 to 17 years for this application" at the time of initial approval (FDA DDD 2018a).

Since its initial approval, no efficacy supplements have been submitted for Qbrexza cloth, 2.4%.

Since approval, OSE identified two Newly Identified Safety Signals (NISS)[a] during routine postmarketing surveillance for Qbrexza and completed reviews for: 1) new-onset urinary retention and 2) inadvertent exposure. On September 23, 2022, under Section 505(o)(4), DDD notified the Applicant of these new safety information that was determined should be included in the labeling for Qbrexza. The Applicant submitted a labeling supplement on October 21, 2022, that incorporated the changes of the Safety Labeling Change Notification letter, which was approved on October 28, 2022 (Qbrexza 2022); this included updating WARNINGS AND PRECAUTIONS section 5.1 to "New or Worsening Urinary Retention" and the addition of section 5.4 Risk of Accidental Exposure.

This pediatric postmarketing pharmacovigilance review was prompted by the Qbrexza initial approval on June 28, 2018. Qbrexza has not previously been presented to the Pediatric Advisory Committee.

1.2 RELEVANT LABELED SAFETY INFORMATION

The following safety information is an excerpt from the Qbrexza (glycopyrronium) cloth, 2.4% labeling (Qbrexza 2022).

2 DOSAGE AND ADMINISTRATION
Qbrexza is for topical use in the underarm area only and not for use in other body areas. Qbrexza is administered by a single-use pre-moistened cloth packaged in individual pouches. Qbrexza should be applied to clean dry skin on the underarm areas only. Qbrexza should not be used more frequently than once every 24 hours.

Tear open the pouch and pull out the cloth, unfold the cloth, and wipe it across one entire underarm once. Using the same cloth, wipe the other underarm once. A single cloth should be used to apply Qbrexza to both underarms.

After applying Qbrexza, discard the cloth in the household trash out of reach of children and others. Wash hands immediately with soap and water after applying and discarding the Qbrexza cloth. Qbrexza may cause temporary dilation of the pupils and blurred vision if it comes in contact with the eyes. Avoid transfer of Qbrexza to the periocular area [see *Warnings and Precautions (5.3)*].

Do not apply Qbrexza to broken skin. Avoid using Qbrexza with occlusive dressings.

4 CONTRAINDICATIONS
Qbrexza is contraindicated in patients with medical conditions that can be exacerbated by the anticholinergic effect of Qbrexza (e.g., glaucoma, paralytic ileus, unstable cardiovascular status

[a] CDER's criteria for a NISS is information that represents a serious adverse event; medication error; or an adverse event that suggests therapeutic inequivalence or product quality issue; AND the information indicates a likely safety signal that warrants further investigation into whether there is a causal association or a new aspect of a known association. CDER Manual of Policy and Procedures 4121.3. Collaborative Identification, Evaluation, and Resolution of a Newly Identified Safety Signal (NISS). Available at: https://www.fda.gov/media/137475/download

in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis, myasthenia gravis, Sjogren's syndrome).

5 WARNINGS AND PRECAUTIONS

5.1 New or Worsening Urinary Retention

New or worsening signs and symptoms of urinary retention (e.g., difficulty passing urine, distended bladder) have occurred in patients taking Qbrexza with or without a history of documented urinary retention. Instruct patients to discontinue use immediately and consult a physician should any of these signs or symptoms develop.

Qbrexza should be used with caution in patients with prostatic hypertrophy or bladder-neck obstruction.

5.2 Control of Body Temperature

In the presence of high ambient temperature, heat illness (hyperpyrexia and heat stroke due to decreased sweating) can occur with the use of anticholinergic drugs such as Qbrexza. Advise patients using Qbrexza to watch for generalized lack of sweating when in hot or very warm environmental temperatures and to avoid use if not sweating under these conditions.

5.3 Operating Machinery or an Automobile

Transient blurred vision may occur with use of Qbrexza. If blurred vision occurs, the patient should discontinue use until symptoms resolve. Patients should be warned not to engage in activities that require clear vision such as operating a motor vehicle or other machinery, or performing hazardous work until the symptoms have resolved.

5.4 Risk of Accidental Exposure

Cases of accidental exposure resulting in mydriasis, anisocoria, and blurred vision have been reported in postmarketing surveillance of Qbrexza. The exposures occurred when children accessed Qbrexza wipes discarded in trash or when patients touched the periocular area after using Qbrexza. In most cases, the mydriasis, anisocoria, and blurred vision were temporary and resolved within one week following exposure. The risk of accidental exposure was increased in these cases by not adhering to recommendations for the appropriate use of Qbrexza.
Strict adherence to the recommended hand washing after use and disposal instructions is of the utmost importance to prevent accidental exposure. [see *Dosage and Administration (2)*].

6 ADVERSE REACTIONS

The following adverse reactions are described in greater detail in other sections
• New or Worsening Urinary Retention [see *Warnings and Precautions (5.1)*]

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

In two double-blind, vehicle-controlled clinical trials (Trial 1 [NCT02530281] and Trial 2 [NCT02530294]) of 459 subjects treated with Qbrexza once daily and 232 treated with vehicle,

subjects were 9 to 76 years of age, 47% male, and the percentages of White, Black (including African Americans), and Asian subjects were 82%, 12%, and 1%, respectively.

Table 1 summarizes the most frequent adverse reactions (≥2%) in subjects with primary axillary hyperhidrosis treated with Qbrexza.

Table 1: Adverse Reactions Occurring in ≥2% of Subjects

Adverse Reactions	Qbrexza (N=459) n (%)	Vehicle (N=232) n (%)
Dry mouth	111 (24.2%)	13 (5.6%)
Mydriasis	31 (6.8%)	0
Oropharyngeal pain	26 (5.7%)	3 (1.3%)
Headache	23 (5.0%)	5 (2.2%)
Urinary hesitation	16 (3.5%)	0
Vision blurred	16 (3.5%)	0
Nasal dryness	12 (2.6%)	1 (0.4%)
Dry throat	12 (2.6%)	0
Dry eye	11 (2.4%)	1 (0.4%)
Dry skin	10 (2.2%)	0
Constipation	9 (2.0%)	0

Table 2 shows the most frequently reported local skin reactions, which were relatively common in both the Qbrexza and vehicle groups.

Table 2: Local Skin Reactions

Local Skin Reactions	Qbrexza (N=454)[a] n (%)	Vehicle (N=231)[a] n (%)
Erythema	77 (17.0%)	39 (16.9%)
Burning/stinging	64 (14.1%)	39 (16.9%)
Pruritus	37 (8.1%)	14 (6.1%)

[a] Patients with a post-baseline local skin reaction assessment

In an open-label safety trial (NCT02553798), 564 subjects were treated for up to an additional 44 weeks after completing Trial 1 or Trial 2. Adverse reactions occurring at a frequency ≥2.0% were: dry mouth (16.9%), vision blurred (6.7%), nasopharyngitis (5.8%), mydriasis (5.3%), urinary hesitation (4.2%), nasal dryness (3.6%), dry eye (2.9%), pharyngitis (2.2%), and application site reactions (pain [6.4%], dermatitis [3.8%], pruritus [3.8%], rash [3.8%], erythema [2.4%]).

6.2 Postmarketing Experience

The following adverse reactions have been identified during post-approval use of Qbrexza. Because the reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to Qbrexza exposure.

• Genitourinary system disorders: new onset urinary retention [see *Warnings and Precautions (5.1)*]

7 DRUG INTERACTIONS

7.1 Anticholinergics

Coadministration of Qbrexza with anticholinergic medications may result in additive interaction leading to an increase in anticholinergic adverse effects [see *Warnings and Precautions (5) and Adverse Reactions (6)*]. Avoid coadministration of Qbrexza with other anticholinergic-containing drugs.

8.4 Pediatric Use

The safety, effectiveness and pharmacokinetics of Qbrexza have been established in pediatric patients age 9 years and older for topical treatment of primary axillary hyperhidrosis [see *Clinical Pharmacology (12.3)*]. Use of Qbrexza in this age group is supported by evidence from two multicenter, randomized, double-blind, parallel-group, vehicle-controlled 4-week trials which included 34 pediatric subjects 9 years and older [see *Adverse Reactions (6.1) and Clinical Studies (14)*]. The safety and effectiveness of Qbrexza have not been established in pediatric patients under 9 years of age.

2 METHODS AND MATERIALS

2.1 FAERS SEARCH STRATEGY

DPV searched the FAERS database with the strategy described in Table 1. Reports that did not describe topical use were excluded.

Table 1. FAERS Search Strategy*

Date of search	June 1, 2022
Time period of search	All reports through May 31, 2022
Search type	Drug Safety Analytics Dashboard Quick Search
Product terms	Product Active Ingredient: Glycopyrronium, glycopyrronium tosylate
MedDRA search terms (Version 25.0)	All Preferred Terms

* See Appendix A for a description of the FAERS database.
Abbreviations: MedDRA=Medical Dictionary for Regulatory Activities

3 RESULTS

3.1 FAERS

3.1.1 Total Number of FAERS Reports by Age

Table 2 presents the number of adult and pediatric FAERS reports through May 31, 2022, with topical glycopyrronium tosylate use.

Table 2. Total Adult and Pediatric FAERS Reports* Received by FDA Through May 31, 2022 with Topical Glycopyrronium Use			
	All reports (U.S.)	**Serious† (U.S.)**	**Death (U.S.)**
Adults (≥ 18 years)	362 (360)	38 (36)	0 (0)
Pediatrics (0 - <18 years)	142 (142)	20 (20)	0 (0)

* May include duplicates and transplacental exposures and have not been assessed for causality
† For the purposes of this review, the following outcomes qualify as serious: death, life- threatening, hospitalization (initial or prolonged), disability, congenital anomaly, required intervention, or other serious important medical events.

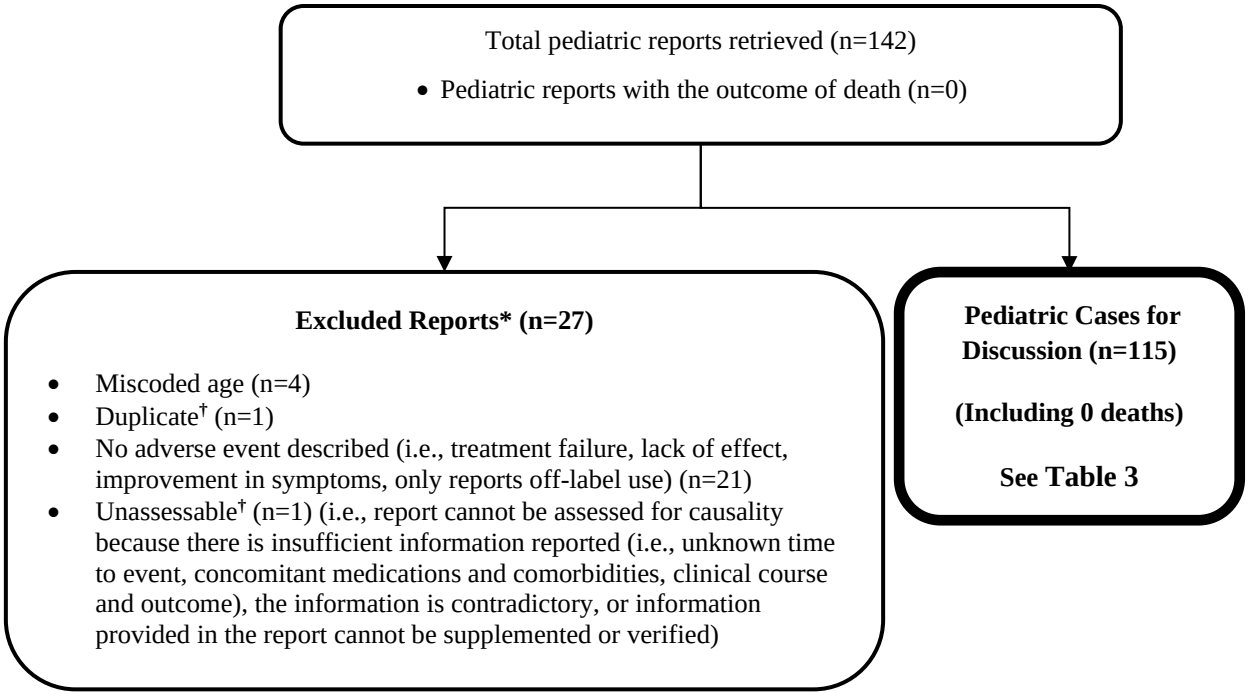
3.1.2 Selection of Pediatric Cases in FAERS

Our FAERS search retrieved 142 pediatric reports through May 31, 2022.

We reviewed all FAERS pediatric reports (n=142). We excluded reports from the case series for various reasons, such as if no adverse event occurred, was a duplicate report, or included miscoding errors (i.e., not a pediatric patient) (See Figure 1). We summarize the remaining cases in the sections below.

Figure 1 presents the selection of cases for the pediatric case series.

Figure 1. Selection of Pediatric Cases with Topical Glycopyrronium Tosylate



* DPV reviewed these reports, but they were excluded from further discussion for the reasons listed above.
† Two reports with serious outcomes were excluded: 1 report was a duplicate, 1 report was unassessable.

3.1.3 Characteristics of Pediatric Cases

Appendix B contains a line listing of the 115 pediatric cases.

Table 3 summarizes the 115 FAERS cases in pediatric patients with use of topical glycopyrronium tosylate received by FDA through May 31, 2022.

Table 3. Characteristics of the FAERS Pediatric Cases with Topical Glycopyrronium Tosylate* Received by FDA Through May 31, 2022 (115=number of cases)		
Age	1 month - <2 years	2
	2 - <6 years	1
	6 - <9 years	1
	9 - <12 years	3
	12 - <18 years	106
	"Adolescent"	1
	"Mid-teens"	1
Sex (n=111)	Male	34
	Female	77
Country	United States	115
Reported reason for use (n=79)	Hyperhidrosis	76
	Unintentional exposure	3
Serious outcome† (n=18)	Hospitalization	6
	Other Serious	15

* Cases reported Qbrexza (n=114) or topical glycopyrronium tosylate (n=1) as a suspect drug name.
† For the purposes of this review, the following outcomes qualify as serious: death, life-threatening, hospitalization (initial or prolonged), disability, congenital anomaly, required intervention, or other serious important medical events. A case can have more than one serious outcome.

3.1.4 Summary of Fatal Pediatric Cases (N=0)

There are no fatal pediatric adverse event cases for further discussion.

3.1.5 Summary of Non-Fatal Pediatric Cases (N=115)

We identified 115 FAERS cases with topical glycopyrronium tosylate in the pediatric population, of which 18 reported a serious outcome. All were U.S. cases, and none were fatal.

Of the 115 FAERS cases, 111 cases describe labeled adverse events (see Section 1.2) without noted increased severity or frequency; thus, these cases are not summarized below.

Of the remaining four cases, two cases lacked information to make an assessment (FAERS 16633737 and 16990288), and one case (FAERS 16229784) reported lack of sweat production, which is the known mechanism of action. We identified one case of dystonia in the pediatric population with Qbrexza cloth, 2.4% that is serious and unlabeled; this case is summarized below.

- FAERS Case #17034085: A 14-year-old female was evaluated in the Emergency Room (ER) for mydriasis while using Qbrexza. During evaluation, the patient was treated with prochlorperazine, ketorolac tromethamine, and diphenhydramine for headache. Evaluation, which included CT and laboratory tests, was unremarkable, and the patient remained hospitalized overnight and received a repeat administration of prochlorperazine, ketorolac tromethamine, and diphenhydramine prior to discharge. Discharge medications

included diphenhydramine, prochlorperazine, and naproxen. The patient experienced dystonia on the day of discharge.

Reviewer comment: This case is confounded by the use of another anticholinergic drug that is labeled for dystonias and had a more plausible temporality.

4 DISCUSSION

We reviewed all FAERS reports with Qbrexza in the pediatric population (ages 0 - <18 years) through May 31, 2022, and 115 cases were included in our case series. Of the reports reviewed, there were no additional new safety signals identified, no increased severity or frequency of any labeled adverse events, and there were no deaths directly associated with Qbrexza. The majority of reports described adverse events that were likely due to concomitant medications (e.g., prochlorperazine), consistent with the known adverse reactions described in labeling (i.e., anticholinergic signs and symptoms), or had limited information that precluded a meaningful causality assessment.

5 CONCLUSION

DPV did not identify any new pediatric safety concerns for Qbrexza at this time.

6 RECOMMENDATION

DPV recommends no regulatory action at this time and will continue to monitor all adverse events associated with the use of Qbrexza.

7 REFERENCES

FDA Division of Dermatology and Dentistry. Qbrexza (glycopyrronium) cloth, 2.4% Approval Letter, NDA 201361, June 28, 2018.

FDA Division of Dermatology and Dentistry. Qbrexza (glycopyrronium) cloth, 2.4% Multidisciplinary Review and Evaluation, NDA 201361, June 28, 2018.

FDA Division of Mitigation Assessment and Medication Error Surveillance. Qbrexza (glycopyrronium) cloth, 2.4% Postmarket Medication Error Review – Unintentional exposures (SSID - 1004509), NDA 201361, June 8, 2022.

FDA Division of Pharmacovigilance I. Qbrexza (glycopyrronium) cloth, 2.4% Pharmacovigilance Review – New-onset urinary retention (SSID 1004508), NDA 201361, May 25, 2022.

Qbrexza (glycopyrronium) cloth, 2.4% Prescribing Information. Journey Medical Corporation. Scottsdale, AZ. October 2022.

8 APPENDICES

8.1 APPENDIX A. FDA ADVERSE EVENT REPORTING SYSTEM (FAERS)

FAERS

FAERS is a database that contains information on adverse event and medication error reports submitted to FDA. The database is designed to support FDA's postmarketing safety surveillance program for drug and therapeutic biological products. The informatic structure of the database adheres to the international safety reporting guidance issued by the International Council on Harmonisation. Adverse events and medication errors are coded to terms in the Medical Dictionary for Regulatory Activities (MedDRA) terminology. The suspect products are coded to valid tradenames or active ingredients in the FAERS Product Dictionary (FPD).

FAERS data have limitations. First, there is no certainty that the reported event was actually due to the product. FDA does not require that a causal relationship between a product and event be proven, and reports do not always contain enough detail to properly evaluate an event. Further, FDA does not receive reports for every adverse event or medication error that occurs with a product. Many factors can influence whether or not an event will be reported, such as the time a product has been marketed and publicity about an event. Therefore, FAERS data cannot be used to calculate the incidence of an adverse event or medication error in the U.S. population.

8.2 APPENDIX B. FAERS LINE LISTING OF THE PEDIATRIC CASE SERIES (N=115)

	Initial FDA Received Date	FAERS Case #	Vers. #	Manufacturer Control #	Case Type	Age (yrs)	Sex	Country Derived	Serious Outcomes*
1	12/04/18	15736736	1		DIRECT	17	Female	USA	HO
2	01/24/19	15864205	1	US-DERMIRA, INC.-US-2018DER000120	NON-EXPEDITED	17	Female	USA	
3	01/24/19	15864210	1	US-DERMIRA, INC.-US-2018DER000135	NON-EXPEDITED	15	Female	USA	
4	01/24/19	15864216	1	US-DERMIRA, INC.-US-2018DER000143	NON-EXPEDITED	17	Female	USA	
5	01/24/19	15864218	1	US-DERMIRA, INC.-US-2018DER000145	NON-EXPEDITED	16	Female	USA	
6	01/24/19	15864223	1	US-DERMIRA, INC.-US-2018DER000150	NON-EXPEDITED	11	Female	USA	
7	01/24/19	15864224	1	US-DERMIRA, INC.-US-2018DER000161	NON-EXPEDITED	17	Male	USA	OT
8	01/24/19	15864227	1	US-DERMIRA, INC.-US-2018DER000160	NON-EXPEDITED	17	Female	USA	OT
9	01/24/19	15864245	1	US-DERMIRA, INC.-US-2018DER000031	NON-EXPEDITED	16	Male	USA	
10	01/24/19	15864264	1	US-DERMIRA, INC.-US-2018DER000061	NON-EXPEDITED	13	Female	USA	
11	01/24/19	15864270	1	US-DERMIRA, INC.-US-2018DER000036	NON-EXPEDITED	14	Female	USA	
12	01/24/19	15864300	1	US-DERMIRA, INC.-US-2018DER004819	NON-EXPEDITED	17	Male	USA	
13	01/24/19	15864301	1	US-DERMIRA, INC.-US-2018DER004820	NON-EXPEDITED	15	Male	USA	
14	01/24/19	15864314	1	US-DERMIRA, INC.-US-2018DER004818	NON-EXPEDITED	mid-teens	Female	USA	
15	01/24/19	15864328	1	US-DERMIRA, INC.-US-2018DER004828	NON-EXPEDITED	17	Female	USA	
16	02/14/19	15962333	3	US-DERMIRA, INC.-US-2019DER000059	EXPEDITED	15	Male	USA	OT
17	02/14/19	15962334	3	US-DERMIRA, INC.-US-2019DER000060	EXPEDITED	12	Female	USA	OT
18	03/14/19	16074185	2	US-DERMIRA, INC.-US-2019DER000129	EXPEDITED	14	Female	USA	OT
19	04/23/19	16229779	1	US-DERMIRA, INC.-US-2019DER000011	NON-EXPEDITED	17	Female	USA	
20	04/23/19	16229784	1	US-DERMIRA, INC.-US-2019DER000002	NON-EXPEDITED	16	Female	USA	
21	04/23/19	16229787	1	US-DERMIRA, INC.-US-2019DER000005	NON-EXPEDITED	16	Female	USA	
22	04/23/19	16229840	1	US-DERMIRA, INC.-US-2019DER000031	NON-EXPEDITED	13	Male	USA	
23	04/23/19	16229843	1	US-DERMIRA, INC.-US-2019DER000030	NON-EXPEDITED	15	Female	USA	
24	04/23/19	16229845	1	US-DERMIRA, INC.-US-2019DER000046	NON-EXPEDITED	16	Male	USA	
25	04/23/19	16229846	1	US-DERMIRA, INC.-US-2019DER000047	NON-EXPEDITED	14	Female	USA	
26	04/23/19	16229850	1	US-DERMIRA, INC.-US-2019DER000054	NON-EXPEDITED	17	Female	USA	
27	04/23/19	16229879	1	US-DERMIRA, INC.-US-2019DER000124	NON-EXPEDITED	15	Male	USA	
28	04/23/19	16229885	1	US-DERMIRA, INC.-US-2019DER000093	NON-EXPEDITED	16	Male	USA	
29	04/23/19	16229887	1	US-DERMIRA, INC.-US-2019DER000096	NON-EXPEDITED	15	Male	USA	

30	04/23/19	16229889	1	US-DERMIRA, INC.-US-2019DER000106	NON-EXPEDITED	17	Female	USA	
31	04/23/19	16229890	1	US-DERMIRA, INC.-US-2019DER000107	NON-EXPEDITED	17	Female	USA	
32	04/23/19	16229892	1	US-DERMIRA, INC.-US-2019DER000109	NON-EXPEDITED	16	Male	USA	
33	04/23/19	16229979	1	US-DERMIRA, INC.-US-2019DER000125	NON-EXPEDITED	15	Female	USA	
34	04/23/19	16230000	1	US-DERMIRA, INC.-US-2019DER000158	NON-EXPEDITED	15	Female	USA	
35	04/23/19	16230001	1	US-DERMIRA, INC.-US-2019DER000159	NON-EXPEDITED	13	Female	USA	
36	04/23/19	16230002	1	US-DERMIRA, INC.-US-2019DER000160	NON-EXPEDITED	16	Female	USA	
37	04/23/19	16230029	1	US-DERMIRA, INC.-US-2019DER000169	NON-EXPEDITED	16	Male	USA	
38	04/23/19	16230032	1	US-DERMIRA, INC.-US-2019DER000174	NON-EXPEDITED	17	Male	USA	
39	04/23/19	16230040	1	US-DERMIRA, INC.-US-2019DER000190	NON-EXPEDITED	17	Female	USA	
40	04/23/19	16230053	1	US-DERMIRA, INC.-US-2019DER000211	NON-EXPEDITED	2	Female	USA	
41	07/25/19	16633706	1	US-DERMIRA, INC.-US-2019DER000318	NON-EXPEDITED	17	Male	USA	
42	07/25/19	16633708	1	US-DERMIRA, INC.-US-2019DER000322	NON-EXPEDITED	13	Female	USA	
43	07/25/19	16633716	1	US-DERMIRA, INC.-US-2019DER000334	NON-EXPEDITED	14	Female	USA	
44	07/25/19	16633724	1	US-DERMIRA, INC.-US-2019DER000325	NON-EXPEDITED	adolescent	NR	USA	
45	07/25/19	16633728	1	US-DERMIRA, INC.-US-2019DER000351	NON-EXPEDITED	15	Female	USA	
46	07/25/19	16633737	1	US-DERMIRA, INC.-US-2019DER000346	NON-EXPEDITED	13	Male	USA	
47	07/25/19	16633741	1	US-DERMIRA, INC.-US-2019DER000354	NON-EXPEDITED	17	Female	USA	
48	07/25/19	16633743	1	US-DERMIRA, INC.-US-2019DER000359	NON-EXPEDITED	14	Female	USA	
49	07/25/19	16633775	1	US-DERMIRA, INC.-US-2019DER000400	NON-EXPEDITED	15	Female	USA	
50	07/25/19	16633885	2	US-DERMIRA, INC.-US-2019DER000225	NON-EXPEDITED	<1	Male	USA	OT
51	07/25/19	16633916	1	US-DERMIRA, INC.-US-2019DER000267	NON-EXPEDITED	7	NR	USA	
52	07/25/19	16633917	1	US-DERMIRA, INC.-US-2019DER000266	NON-EXPEDITED	17	Male	USA	
53	07/25/19	16633921	1	US-DERMIRA, INC.-US-2019DER000269	NON-EXPEDITED	17	Male	USA	
54	07/25/19	16633925	1	US-DERMIRA, INC.-US-2019DER000272	NON-EXPEDITED	17	Female	USA	
55	07/25/19	16633931	1	US-DERMIRA, INC.-US-2019DER000280	NON-EXPEDITED	14	Female	USA	
56	07/25/19	16633935	1	US-DERMIRA, INC.-US-2019DER000287	NON-EXPEDITED	13	Male	USA	
57	07/25/19	16633937	1	US-DERMIRA, INC.-US-2019DER000292	NON-EXPEDITED	17	Female	USA	
58	07/25/19	16633941	1	US-DERMIRA, INC.-US-2019DER000295	NON-EXPEDITED	16	Male	USA	
59	07/25/19	16633955	1	US-DERMIRA, INC.-US-2019DER000313	NON-EXPEDITED	16	Female	USA	
60	08/26/19	16744849	1		DIRECT	16	Female	USA	OT
61	09/10/19	16794561	1		DIRECT	15	Female	USA	
62	10/23/19	16953603	1	US-DERMIRA, INC.-US-2019DER000405	NON-EXPEDITED	13	Female	USA	
63	10/23/19	16953606	1	US-DERMIRA, INC.-US-2019DER000409	NON-EXPEDITED	13	Female	USA	
64	10/23/19	16953617	1	US-DERMIRA, INC.-US-2019DER000424	NON-EXPEDITED	15	Female	USA	

65	10/23/19	16953618	1	US-DERMIRA, INC.-US-2019DER000426	NON-EXPEDITED	13	Male	USA	
66	10/23/19	16953635	1	US-DERMIRA, INC.-US-2019DER000452	NON-EXPEDITED	13	Female	USA	OT
67	10/23/19	16953637	2	US-DERMIRA, INC.-US-2019DER000454	NON-EXPEDITED	13	Female	USA	
68	10/23/19	16953639	1	US-DERMIRA, INC.-US-2019DER000470	NON-EXPEDITED	14	Female	USA	
69	10/23/19	16953644	2	US-DERMIRA, INC.-US-2019DER000477	NON-EXPEDITED	15	Female	USA	
70	10/23/19	16953646	1	US-DERMIRA, INC.-US-2019DER000479	NON-EXPEDITED	15	Female	USA	
71	10/23/19	16953649	2	US-DERMIRA, INC.-US-2019DER000483	NON-EXPEDITED	16	Female	USA	
72	10/23/19	16953651	1	US-DERMIRA, INC.-US-2019DER000486	NON-EXPEDITED	16	Male	USA	
73	10/23/19	16953655	2	US-DERMIRA, INC.-US-2019DER000493	NON-EXPEDITED	14	Female	USA	
74	10/23/19	16953656	1	US-DERMIRA, INC.-US-2019DER000494	NON-EXPEDITED	17	Male	USA	
75	10/23/19	16953659	2	US-DERMIRA, INC.-US-2019DER000456	NON-EXPEDITED	15	Female	USA	
76	10/31/19	16985980	1		DIRECT	17	Female	USA	HO, OT
77	11/02/19	16990288	1		DIRECT	16	Female	USA	OT
78	11/14/19	17034085	3	US-DERMIRA, INC.-US-2019DER000523	EXPEDITED	14	Female	USA	HO, OT
79	11/27/19	17086441	1		DIRECT	17	Male	USA	
80	01/14/20	17267275	1		DIRECT	16	NR	USA	
81	01/23/20	17306804	1	US-DERMIRA, INC.-US-2019DER000501	NON-EXPEDITED	16	Female	USA	
82	01/23/20	17306808	1	US-DERMIRA, INC.-US-2019DER000499	NON-EXPEDITED	17	Female	USA	
83	01/23/20	17306816	1	US-DERMIRA, INC.-US-2019DER000518	NON-EXPEDITED	16	Male	USA	
84	01/23/20	17306820	1	US-DERMIRA, INC.-US-2019DER000519	NON-EXPEDITED	12	Female	USA	
85	01/23/20	17306824	1	US-DERMIRA, INC.-US-2019DER000505	NON-EXPEDITED	10	Male	USA	
86	01/23/20	17306826	1	US-DERMIRA, INC.-US-2019DER000511	NON-EXPEDITED	16	Male	USA	
87	01/23/20	17306833	1	US-DERMIRA, INC.-US-2019DER000532	NON-EXPEDITED	15	NR	USA	
88	01/23/20	17306845	1	US-DERMIRA, INC.-US-2019DER000525	NON-EXPEDITED	17	Female	USA	
89	01/23/20	17306847	1	US-DERMIRA, INC.-US-2019DER000527	NON-EXPEDITED	17	Female	USA	
90	01/23/20	17306848	1	US-DERMIRA, INC.-US-2019DER000526	NON-EXPEDITED	13	Female	USA	
91	01/23/20	17306851	1	US-DERMIRA, INC.-US-2019DER000556	NON-EXPEDITED	15	Female	USA	
92	01/23/20	17306857	1	US-DERMIRA, INC.-US-2019DER000557	NON-EXPEDITED	17	Male	USA	
93	01/23/20	17306860	1	US-DERMIRA, INC.-US-2019DER000563	NON-EXPEDITED	16	Female	USA	
94	01/23/20	17306879	1	US-DERMIRA, INC.-US-2019DER000574	NON-EXPEDITED	1	Male	USA	
95	01/23/20	17306889	1	US-DERMIRA, INC.-US-2019DER000566	NON-EXPEDITED	14	Female	USA	
96	04/23/20	17703083	1	US-DERMIRA, INC.-US-2020DER000048	NON-EXPEDITED	9	Female	USA	
97	04/23/20	17703098	1	US-DERMIRA, INC.-US-2020DER000073	NON-EXPEDITED	13	Female	USA	
98	04/23/20	17703101	1	US-DERMIRA, INC.-US-2020DER000077	NON-EXPEDITED	16	Female	USA	
99	04/23/20	17703108	2	US-DERMIRA, INC.-US-2020DER000079	NON-EXPEDITED	13	Female	USA	

100	04/23/20	17703112	1	US-DERMIRA, INC.-US-2020DER000081	NON-EXPEDITED	17	Male	USA	
101	07/19/20	18044165	1		DIRECT	16	Female	USA	
102	07/22/20	18057033	1	US-DERMIRA, INC.-US-2020DER000111	NON-EXPEDITED	16	Male	USA	
103	07/22/20	18057048	1	US-DERMIRA, INC.-US-2020DER000121	NON-EXPEDITED	13	Female	USA	
104	07/22/20	18057053	1	US-DERMIRA, INC.-US-2020DER000160	NON-EXPEDITED	14	Female	USA	
105	08/25/20	18196495	1		DIRECT	15	Female	USA	HO, OT
106	09/01/20	18222922	1		DIRECT	14	Female	USA	OT
107	10/26/20	18429513	1	US-DERMIRA, INC.-US-2020DER000197	NON-EXPEDITED	14	Female	USA	
108	12/02/20	18572051	3	US-DERMIRA, INC.-US-2020DER000258	EXPEDITED	16	Female	USA	HO
109	01/22/21	18775117	1	US-DERMIRA, INC.-US-2020DER000232	NON-EXPEDITED	13	Female	USA	
110	01/22/21	18775162	1	US-DERMIRA, INC.-US-2020DER000271	NON-EXPEDITED	16	Male	USA	
111	03/15/21	19007612	1	US-TEVA-2021-US-1887771	EXPEDITED	14	Female	USA	HO
112	04/22/21	19169497	1	US-DERMIRA, INC.-US-2021DER000001	NON-EXPEDITED	16	Female	USA	
113	11/23/21	20101675	2	US-JOURNEY MEDICAL CORPORATION-2021JNY00045	EXPEDITED	15	Male	USA	OT
	12/27/21	20237235	1		DIRECT	14	Female	USA	OT
114	02/08/22	20445623†	1		DIRECT	14	Female	USA	
115	03/09/22	20574047	1	US-JOURNEY MEDICAL CORPORATION-2022JNY00618	EXPEDITED	17	Male	USA	OT

*As per 21 CFR 314.80, the regulatory definition of serious is any adverse drug experience occurring at any dose that results in any of the following outcomes: death, a life-threatening adverse drug experience, inpatient hospitalization or prolongation of existing hospitalization, a persistent or significant disability/incapacity, a congenital anomaly/birth defect, or other serious important medical events. Those which are blank were not marked as serious (per the previous definition) by the reporter, and are coded as non-serious. A case may have more than one serious outcome.

† Reporters submitted separate follow-up report for the patient.

Abbreviations: HO=hospitalization, NR=Not reported, OT=other medically significant

---

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/

MELISSA A REYES
12/07/2022 11:50:13 AM

IVONE E KIM
12/07/2022 11:51:51 AM

CARMEN CHENG
12/07/2022 12:01:08 PM

CINDY M KORTEPETER
12/07/2022 12:04:53 PM