

ESKATA- hydrogen peroxide solution
Aclaris Therapeutics, Inc.

HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use ESKATA[®] safely and effectively. See full prescribing information for ESKATA[®].

ESKATA[®] (hydrogen peroxide) topical solution

Initial U.S. Approval: 2017

----- **INDICATIONS AND USAGE** -----

ESKATA is indicated for the treatment of seborrheic keratoses that are raised. (1)

----- **DOSAGE AND ADMINISTRATION** -----

- To be administered by a healthcare provider. (2.1)
- For topical use only. Not for ophthalmic use. (2.1)
- Do not apply ESKATA topical solution to open or infected seborrheic keratoses. (2.1)
- Apply 4 times, approximately 1 minute apart, to the targeted lesion(s) during a single in-office treatment session. (2.1)

----- **DOSAGE FORMS AND STRENGTHS** -----

Topical solution: 40% (w/w) hydrogen peroxide (3)

----- **CONTRAINDICATIONS** -----

None (4)

----- **WARNINGS AND PRECAUTIONS** -----

- **Eye Disorders:** Avoid eye exposure. Eye disorders including corneal injury (erosion, ulceration, perforation, and scarring), chemical conjunctivitis, eyelid edema, severe eye pain, or permanent eye injury, including blindness can occur after exposure. If accidental exposure occurs, flush eyes with water for 15 to 30 minutes and initiate monitoring, and further evaluation as appropriate. (5.1)
- **Local Skin Reactions:** severe reactions, including ulcerations and scarring, may occur. Do not retreat with ESKATA until the skin has recovered from any reaction caused by the previous treatment (5.2)

----- **ADVERSE REACTIONS** -----

Common adverse reactions include erythema (99%), stinging (97%), edema (91%), scaling (90%), crusting (81%), and pruritus (58%). (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Aclaris Therapeutics, Inc at 1-833-225-2747 or FDA at 1-800-FDA-1088 or <http://www.fda.gov/medwatch>.

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling.

Revised: 3/2019

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* Sections or subsections omitted from the full prescribing information are not listed.

FULL PRESCRIBING INFORMATION

1. INDICATION AND USAGE

ESKATA is indicated for the treatment of seborrheic keratoses that are raised.

2. DOSAGE AND ADMINISTRATION

2.1 Important Administration Information

ESKATA is to be administered by a health care provider.

For topical use only. Not for oral, ophthalmic, or intravaginal use.

Do not apply ESKATA topical solution to open or infected seborrheic keratoses.

Prior to application of ESKATA, ensure the surface of seborrheic keratosis lesion is clear of oil and debris (an alcohol wipe can be used).

During a single in-office treatment session, apply ESKATA to seborrheic keratosis lesions 4 times, approximately 1 minute apart. After one use, replace the cap and discard the unit dose applicator.

When treating seborrheic keratoses on the face, take appropriate actions to ensure that ESKATA will not come into contact with the eyes.

If the treated lesions have not completely cleared approximately 3 weeks after treatment, another treatment may be administered following the same procedure.

2.2 Dosage and Administration Instructions

Preparation of the ESKATA applicator

Wear nitrile or vinyl examination gloves during the activation of the ESKATA applicator and during the administration of the solution to the lesion(s).

The method for preparing the ESKATA applicator for use is illustrated below. While activating the applicator, hold it away from the patient. Do not remove the cap until after completion of Step 4

(below).



Step 1: Hold the ESKATA applicator so that the applicator cap is pointing up



Diamond symbol

Step 2: Crush the ampule in the applicator by applying finger pressure to the diamond symbol on the applicator barrel



Step 3: Remove the sleeve



Step 4: Holding the applicator with cap pointing up, tap the bottom of the applicator to separate the solution from the crushed ampule

Application of ESKATA topical solution

Following release of the solution from the ampule, remove the cap from the ESKATA applicator. Gently squeeze the applicator barrel to express the solution to the applicator tip. Using the applicator,

apply the solution directly to the seborrheic keratosis in a circular motion. Apply enough solution to uniformly wet the lesion surface, including the edges without excess running or dripping.

Wait 1 minute and observe. Whitening of the lesion may occur.

Do not progress to subsequent applications if severe erythema/edema or pain occur. Apply again in the same manner 3 additional applications 1 minute apart.

Minimize the amount of drug that comes into contact with surrounding skin. If ESKATA does come into contact with surrounding skin, use an absorbent wipe to remove any excess solution (do not use paper towels or tissue).

3. DOSAGE FORMS AND STRENGTHS

ESKATA topical solution is a clear, colorless solution containing 40% (w/w) hydrogen peroxide.

4. CONTRAINDICATIONS

None.

5. WARNINGS AND PRECAUTIONS

5.1 Eye Disorders

Do not apply to the eyes or mucous membranes. Avoid treating seborrheic keratoses within the orbital rim. Direct contact with the eye can cause corneal injury (erosion, ulceration, perforation, and scarring), chemical conjunctivitis, eyelid edema, severe eye pain, or permanent eye injury, including blindness.

If accidental exposure occurs, flush with water for 15 to 30 minutes and initiate monitoring, and further evaluation as appropriate.

5.2 Local Skin Reactions

Skin reactions occurred in the treatment area after application of ESKATA. Severe local skin reactions included erosion, ulceration, vesiculation and scarring. [See *Adverse Reactions (6.1)*]. Do not initiate a second treatment course with ESKATA until the skin has recovered from any reaction caused by the previous treatment.

6. ADVERSE REACTIONS

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.

The data described below reflect exposure to ESKATA or vehicle in a total of 937 subjects with seborrheic keratoses that are raised. Overall, 42% of the subjects were male and 58% were female. Ninety-eight (98) percent of the subjects were Caucasian and the mean age was 68.7 years.

At each visit, local skin reactions were graded for severity to determine the maximum severity after treatment. Table 1 presents the percentage of subjects with the local adverse reactions by the most severe grade reported during the course of the trials.

Table 1. Percentage of Subjects with Local Skin Reactions by Severity

	ESKATA	Vehicle
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	N=467				N=470			
	Mild	Moderate	Severe	Total	Mild	Moderate	Severe	Total
Erythema	13	67	19	99	29	5	<1	34
Stinging	34	49	15	97	9	1	<1	10
Edema	28	48	15	91	6	1	0	6
Scaling	49	36	5	90	28	5	1	33
Crusting	34	38	8	81	13	5	1	19
Pruritus	34	18	5	58	7	1	<1	8
Hyperpigmentation	32	7	<1	39	1	<1	0	1
Vesicles	21	3	1	24	<1	0	0	<1
Hypopigmentation	16	3	<1	19	1	<1	0	1
Erosion	12	2	1	15	<1	0	0	1
Ulceration	6	2	<1	9	1	1	0	2
Atrophy	4	0	0	4	0	0	0	0
Scarring	3	<1	<1	3	0	0	0	0

Common local skin reactions observed 10 minutes after treatment include: erythema (98%), stinging (93%), edema (85%), pruritus (32%), and vesiculation (18%).

Common local skin reactions observed 1 week after treatment are scaling (72%), erythema (66%), crusting (67%), pruritus (18%), erosion (9%), and ulceration (4%).

Common local skin reactions observed 15 weeks after the initial treatment are erythema (21%), hyperpigmentation (18%), scaling (16%), crusting (12%), and hypopigmentation (7%).

Less common adverse reactions occurring in $\geq 0.5\%$ of subjects treated with ESKATA include eyelid edema (0.6%) and herpes zoster (0.6%).

6.2 Postmarketing Experience

The following adverse reactions have been identified during post-approval use of ESKATA. Because these 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 drug exposure.

Skin and subcutaneous tissues disorders: crepitus

8. USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

Hydrogen peroxide is not absorbed systemically following topical administration, and maternal use is not expected to result in fetal exposure to the drug.

8.2 Lactation

Risk Summary

Hydrogen peroxide is not absorbed systemically by the mother following topical administration, and breastfeeding is not expected to result in exposure of the child to hydrogen peroxide.

8.4 Pediatric Use

Seborrheic keratosis is not seen in the pediatric population.

8.5 Geriatric Use

Of the 841 subjects treated with ESKATA in the clinical trials, 70% were 65 years of age and older and 26% were 75 years of age and older. No overall differences in safety or effectiveness were observed between these subjects and younger subjects.

10. OVERDOSE

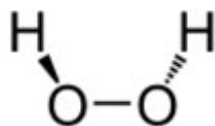
Topical overdosing of ESKATA could result in an increased incidence and severity of local skin reactions.

11. DESCRIPTION

ESKATA (hydrogen peroxide) topical solution, 40% (w/w) is a clear, colorless solution for topical administration, which contains the active ingredient, hydrogen peroxide.

The chemical name of hydrogen peroxide is dihydrogen dioxide.

The molecular formula of hydrogen peroxide is H_2O_2 and the molecular weight is 34.01. Hydrogen peroxide is represented by the following structural formula:



ESKATA contains 40% (w/w) hydrogen peroxide in an aqueous solution of isopropyl alcohol and water.

12. CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

The mechanism of action for ESKATA for the treatment of seborrheic keratosis is unknown.

12.2 Pharmacodynamics

The pharmacodynamics of ESKATA in the treatment of seborrheic keratosis are unknown.

12.3 Pharmacokinetics

Following application of ESKATA in patients with seborrheic keratosis lesions, hydrogen peroxide rapidly dissociates into water and reactive oxygen species. Indirect assessment of reactive oxygen species in patients with seborrheic keratosis lesions did not demonstrate any systemic absorption of hydrogen peroxide.

13. NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term animal studies have not been performed to evaluate the carcinogenic potential of ESKATA or hydrogen peroxide.

Hydrogen peroxide has been found to exhibit positive results in in vitro tests for genotoxicity, but has not exhibited positive results in in vivo tests for genotoxicity, presumably due to the rapid metabolism of hydrogen peroxide.

The effects of hydrogen peroxide on fertility have not been evaluated. Hydrogen peroxide has been associated with effects on sperm function and elevated testicular hydrogen peroxide concentration has been implicated in male infertility, although in vivo, no effect of hydrogen peroxide on sperm function has been demonstrated.

14. CLINICAL STUDIES

In two double-blind, vehicle-controlled clinical trials, 937 subjects with 4 clinically typical seborrheic keratoses that are raised on the face, trunk, or extremities were randomized to treatment with either ESKATA or vehicle. Subjects ranged from 42 to 91 years of age (mean 68.7 years), 58% percent were female, and 98% were Caucasian. A total of 925 subjects completed the trials. Each lesion was treated with 4 applications, at baseline and again at Day 22, if needed, and subjects were followed through Day 106.

Efficacy was assessed at Day 106. Success rate was defined as the proportion of subjects achieving "clear" on the Physician's Lesion Assessment Scale for all 4 treated lesions. Efficacy was also assessed for the proportion of subjects achieving "clear" on the Physician's Lesion Assessment Scale for at least 3 of 4 lesions. Table 3 presents the efficacy results for the two clinical trials.

Table 2. Percentage of Subjects Achieving Clearance of Target Lesions at Day 106 in Study 1 and Study 2

	Study 1		Study 2	
	ESKATA N=223	Vehicle N=227	ESKATA N=244	Vehicle N=243
All 4 lesions "Clear"	4%	0%	8%	0%
At least 3 of 4 lesions "Clear"	13%	0%	23%	0%

16. HOW SUPPLIED/STORAGE AND HANDLING

ESKATA (hydrogen peroxide) topical solution, 40% (w/w) is a clear, colorless solution and is supplied in a unit dose package. The available carton packages are presented below:

Dosage Strength	Fill Volume	Deliverable Volume	Number of unit dose packages per carton	NDC#
40% (w/w)	1.5 mL	0.7 mL	1	71180-001-01
			3	71180-001-03
			12	71180-001-12
	2.2 mL	1.3 mL	1	71180-002-01
			3	71180-002-03
			12	71180-002-12

Store ESKATA at controlled room temperature of 20°C to 25°C (68°F to 77°F), excursions permitted between 15°C and 30°C (59° F and 86° F).

17. PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Patient Information).

Ophthalmic Adverse Reactions

Inform patients that severe eye injury can occur with ESKATA application. Advise patients to inform the healthcare provider immediately if ESKATA runs into eyes, mouth, or nose during administration [see *Warnings and Precautions (5.1)*].

Local Skin Reactions

Inform patients that treatment with ESKATA may lead to local skin reactions [see *Warnings and Precautions (5.2)*].

Manufactured & Packaged by:

James Alexander Corp.
845 Route 94
Blairstown, NJ 07825
United States

For:

Aclaris Therapeutics, Inc.
640 Lee Road, Suite 200
Wayne, PA 19087
United States

US Patent Numbers: US 7,381,427, US 9,675,639, US 9,980,983 and US 10,098,910

Patient Information ESKATA [®] (es-KAH-tah) (hydrogen peroxide), topical solution
IMPORTANT: ESKATA topical solution is for use as an in-office treatment. ESKATA is applied by your healthcare provider and is not for use at home.
What is ESKATA ? ESKATA is a prescription medicine used to treat seborrheic keratoses that are raised.
Before treatment with ESKATA, tell your healthcare provider about all of your medical conditions, including if you: <ul style="list-style-type: none">• are being treated or have had treatments for seborrheic keratosis• have other skin problems• are pregnant or plan to become pregnant.• are breastfeeding or plan to breastfeed.
Tell your healthcare provider about all the medications you take, including prescription and over-the-counter medicines, vitamins and herbal supplements.
How should I receive ESKATA ? <ul style="list-style-type: none">• Your healthcare provider will apply ESKATA to your seborrheic keratosis lesions.• Your healthcare provider may apply ESKATA again, about 3 weeks after your treatment if your treated lesions are not completely gone.
What are the possible side effects with ESKATA? ESKATA can cause serious side effects, including: <ul style="list-style-type: none">• Eye problems. Eye problems can happen if ESKATA gets into your eyes, including:<ul style="list-style-type: none">◦ ulcers or small holes in your eyes◦ scarring◦ redness◦ irritation◦ eyelid swelling◦ severe eye pain◦ permanent eye injury, including blindness

If ESKATA accidentally gets into your eyes, your healthcare provider will tell you to flush them well with water for 15 to 30 minutes. Your healthcare provider may send you to another healthcare care provider if needed.

- **Local skin reactions.** Skin reactions have happened in and around the treatment area after application of ESKATA. Severe skin reactions can include: breakdown of the outer layer of the skin (erosion), ulcers, blisters and scarring. Tell your healthcare provider if you have any skin reactions during treatment with ESKATA.

The most common side effects of ESKATA include: itching, stinging, crusting, swelling, redness and scaling.

Your healthcare provider will not apply another treatment of ESKATA if your treated area is still irritated from the previous treatment.

Tell your healthcare provider right away if ESKATA gets into your eyes, mouth or nose during application.

These are not all of the possible side effects of ESKATA.

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

General information about the safe and effective use of ESKATA.

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. You can ask your pharmacist or healthcare provider for information that is written for healthcare professionals.

What are the ingredients in ESKATA?

Active ingredient: hydrogen peroxide

Inactive ingredients: isopropyl alcohol and water.

Manufactured & Packaged by: James Alexander Corp., 845 Route 94, Blairstown, NJ 07825 United States

For: Aclaris Therapeutics, Inc., 640 Lee Rd, Suite 200, Wayne, PA 19087 United States

US Patent Number: US 7,381,427, US 9,675,639, US 9,980,983 and US 10,098,910

This Patient Information has been approved by the U.S. Food and Drug Administration

Issued:
December
2017

PRINCIPAL DISPLAY PANEL - 0.7 mL Applicator Carton

NDC: 71180-001-03

3 Units

Rx Only

Store at 20-25°C

ACLARIS

THERAPEUTICS

eskata™

(hydrogen peroxide) topical solution, 40% (w/w)

Single use applicator/0.7 mL. For Topical Use Only.

Marketed by

Aclaris Therapeutics, Inc.

Malvern, PA 19355

www.aclaristx.com

US Patent 7,381,427


eskata™
 (hydrogen peroxide) topical solution, 40% (w/w)

3 Units - Rx Only
 FOR ADMINISTRATION BY
 HEALTH PROFESSIONAL ONLY

NDC: 71180-001-03

3 Units
 Rx Only
 Store at 20-25°C


ACLARIS
 THERAPEUTICS

Marketed by
 Aclaris Therapeutics, Inc.
 Malvern, PA 19355
 www.aclaristx.com

US Patent 7,381,427


eskata™
 (hydrogen peroxide) topical solution, 40% (w/w)



Single use applicator/0.7 mL. For Topical Use Only.

3 Units - Rx Only
 FOR ADMINISTRATION BY
 HEALTH PROFESSIONAL ONLY

eskata™
 (hydrogen peroxide) topical solution, 40% (w/w)



NDC: 71180-001-03

Rev 01A2W

Manufactured by
 James Alexander Corp.
 Blairstown, NJ 07825

Lot #
 Exp. Date:

US Patent 7,381,427
 See package insert for dosage information.
 for Irrigation, USP
 USP and Sterile Water
 Isopropyl Alcohol
 Inactive Ingredients:

(hydrogen peroxide) topical solution, 40% (w/w)

(hydrogen peroxide) topical solution, 40% (w/w)

eskata™



Marketed by
Aclaris Therapeutics, Inc.
Malvern, PA 19355
www.aclarisbx.com



eskata™

(hydrogen peroxide) topical solution, 40% (w/w)

3 Units

Single use applicator/0.7 mL



PRINCIPAL DISPLAY PANEL - 1.3 mL Applicator Carton

NDC: 71180-002-03

3 Units

Rx Only

Store at 20-25°C

ACLARIS

THERAPEUTICS

eskata™

(hydrogen peroxide) topical solution, 40% (w/w)

Single use applicator/1.3 mL. For Topical Use Only.

Marketed by

Aclaris Therapeutics, Inc.

Malvern, PA 19355

www.aclaristx.com

US Patent 7,381,427


eskata™
 (hydrogen peroxide) topical solution, 40% (w/w)

3 Units - Rx Only
 FOR ADMINISTRATION BY
 HEALTH PROFESSIONAL ONLY

NDC: 71180-002-03

3 Units
Rx Only
 Store at 20-25°C



Marketed by
 Aclaris Therapeutics, Inc.
 Malvern, PA 19355
 www.aclaristx.com

US Patent 7,381,427



eskata™
 (hydrogen peroxide) topical solution, 40% (w/w)



Single use applicator/13 mL. For Topical Use Only.

3 Units - Rx Only
 FOR ADMINISTRATION BY
 HEALTH PROFESSIONAL ONLY

(hydrogen peroxide) topical solution, 40% (w/w)

eskata™



Rev. 01.13.17

Marketed by
 Aclaris Therapeutics, Inc.
 Malvern, PA 19355
 www.aclaristx.com
 Manufactured by
 James Alexander Corp.
 Blairtown, NJ 07825



Lot # XXXXXXXX
 Exp. Date: XXXX/XX

US Patent 7,381,427
 See package insert for dosage information.

Inactive Ingredients:
 Isopropyl Alcohol
 USP and Sterile Water
 for Irrigation, USP

(hydrogen peroxide) topical solution, 40% (w/w)

eskata™



 **eskata™**
(hydrogen peroxide) topical solution, 40% (w/w)

3 Units
Single use applicator/1.3 mL



 **eskata™**
(hydrogen peroxide) topical solution, 40% (w/w)

3 Units
Single use applicator/1.3 mL

ESKATA

hydrogen peroxide solution

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:71180-001
Route of Administration	TOPICAL		

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
HYDROGEN PEROXIDE (UNII: BBX060AN9V) (HYDROGEN PEROXIDE - UNII:BBX060AN9V)	HYDROGEN PEROXIDE	40 mg in 100 mg

Inactive Ingredients

Ingredient Name	Strength
ISOPROPYL ALCOHOL (UNII: ND2M416302)	
WATER (UNII: 059QF0KO0R)	

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:71180-001-01	1 in 1 CARTON	12/14/2017	
1		280 mg in 1 APPLICATOR; Type 0: Not a Combination Product		
2	NDC:71180-001-03	3 in 1 CARTON	12/14/2017	
2		280 mg in 1 APPLICATOR; Type 0: Not a Combination Product		
3	NDC:71180-001-12	12 in 1 CARTON	12/14/2017	
3		280 mg in 1 APPLICATOR; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA209305	12/14/2017	

ESKATA

hydrogen peroxide solution

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:71180-002
Route of Administration	TOPICAL		

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
HYDROGEN PEROXIDE (UNII: BBX060AN9V) (HYDROGEN PEROXIDE - UNII:BBX060AN9V)	HYDROGEN PEROXIDE	40 mg in 100 mg

Inactive Ingredients

Ingredient Name	Strength
ISOPROPYL ALCOHOL (UNII: ND2M416302)	
WATER (UNII: 059QF0KO0R)	

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:71180-002-01	1 in 1 CARTON	12/14/2017	
1		520 mg in 1 APPLICATOR; Type 0: Not a Combination Product		
2	NDC:71180-002-03	3 in 1 CARTON	12/14/2017	
2		520 mg in 1 APPLICATOR; Type 0: Not a Combination Product		
3	NDC:71180-002-12	12 in 1 CARTON	12/14/2017	
3		520 mg in 1 APPLICATOR; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA209305	12/14/2017	

Labeler - Aclaris Therapeutics, Inc. (032365882)**Establishment**

Name	Address	ID/FEI	Business Operations
James Alexander Corp.		040756421	ANALYSIS(71180-001, 71180-002) , LABEL(71180-001, 71180-002) , MANUFACTURE(71180-001, 71180-002)