SKLICE (ivermectin) Lotion, 0.5% for topical use
Initial U.S. Approval: 1996

1.1 Indication
SKLICE Lotion is indicated for the topical treatment of head lice infestations in patients 6 months of age and older. (1)

1.2 Adjunctive Measures
SKLICE Lotion should be used in the context of an overall lice management program:
- Wash (in hot water) or dry-clean all recently worn clothing, hats, used bedding and towels.
- Wash personal care items such as combs, brushes and hair clips in hot water.
- A fine-tooth comb or special nit comb may be used to remove dead lice and nits.
- For topical use only. Not for oral, ophthalmic or intravaginal use. (2)
- Apply SKLICE Lotion to dry hair in an amount sufficient (up to 1 tube) to thoroughly coat the hair and scalp. (2)
- After 10 minutes, rinse off with water. (2)
- For single use. Discard any unused portion. (2)

2 Dosage and Administration
The tube is intended for single use; discard any unused portion.

Apply SKLICE Lotion to dry hair in an amount sufficient (up to 1 tube) to thoroughly coat the hair and scalp. Leave SKLICE Lotion on the hair and scalp for 10 minutes, and then rinse off with water. The tube is intended for single use; discard any unused portion.

Avoid contact with eyes.

3 Dosage Forms and Strengths
Lotion: 0.5% (3)

4 Contraindications
None. (4)

5 Warnings and Precautions

5.1 Ingestion in Pediatric Patients
SKLICE Lotion, including ivermectin, is absorbed systemically following oral administration. Oral doses of 1.5, 3, and 6 mg/kg ivermectin were administered in the period of organogenesis (gestational days 6–17) to pregnant female rats. Maternal toxicity and abortion occurred at 6 mg/kg/day. Cleft palate and clubbed forepaws occurred in the fetuses from the 10 mg/kg/day group. Oral doses of 2.5, 5, and 10 mg/kg/day ivermectin were administered during the period of organogenesis (gestational days 6–17) to pregnant female rats. Maternal death and pre-implantation loss occurred at 10 mg/kg/day. Cleft palate and wavy ribs were seen in fetuses from the 10 mg/kg/day group. Oral doses of 1.5, 3, and 6 mg/kg/day ivermectin were administered during the period of organogenesis (gestational days 6–18) to pregnant female rabbits. Maternal toxicity and abortion occurred at 6 mg/kg/day. Cleft palate and clubbed forepaws occurred in the fetuses from the 3 and 6 mg/kg groups. These teratogenic effects were found only at or near doses that were maternally toxic to the pregnant female. Therefore, ivermectin does not appear to be selectively fetotoxic to the developing fetus.

6 Adverse Reactions

6.1 Clinical Trials Experience

6.2 Pharmacokinetics

6.3 Pharmacodynamics

6.4 Pharmacokinetics

8 Use in Specific Populations

8.1 Pregnancy
SKLICE Lotion is not for oral, ophthalmic, or intravaginal use. (2)

8.2 Pediatric Use
SKLICE Lotion has not been established in pediatric patients below the age of 6 months. These teratogenic effects were found only at or near doses that were maternally toxic to the pregnant female. Therefore, ivermectin does not appear to be selectively fetotoxic to the developing fetus.

8.3 Nursing Mothers

10 Overdosage

12 Clinical Pharmacology

12.1 Mechanism of Action

12.2 Pharmacodynamics

12.3 Pharmacokinetics

13 Nonclinical Toxicology

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

14 Clinical Studies

16 How Supplied/Storage and Handling

17 Patient Counseling Information

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

SKLICE (ivermectin) Lotion, for topical administration, is an oil-in-water lotion containing 0.5% ivermectin.

Ivermectin, the active ingredient, is a pectolide, derived from the fermentation of a soil dwelling actinomycete, Streptomyces avermitilis.

Ivermectin is a mixture containing at least 90% 5-O-demethyl-22,23-dihydroavermectin A$_2$, and less than 10% 5-O-demethyl-25-de(1)-methylprop-22,23-dihydroavermectin A$_2$. Generally referred to as 22,23-dihydroavermectin B$_1$ and B$_2$, or H$_{2}$B$_{1a}$ and H$_{2}$B$_{1b}$, respectively.

The respective empirical formulas are C$_{74}$H$_{74}$O$_{47}$ and C$_{72}$H$_{72}$O$_{46}$, with molecular weights of 875.10 and 861.07, respectively. The structural formulas are:

![Structural formula of ivermectin]

Component H$_2$B$_{2a}$: R = CH$_3$CH$_2$; Component H$_2$B$_{2b}$: R = CH$_3$

SKLICE Lotion contains the following inactive ingredients: water, olive oil, cetyl alcohol, Crodan AWS, lanolin alcohol, cyclomethicone, shea butter, sodium citrate, sorbitan tristearate, methylparaben, propylparaben, and citric acid.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Ivermectin, a member of the avermectin class, causes death of parasites, primarily through binding selectively and with high affinity to glutamate-gated chloride channels, which occur in invertebrate nerve and muscle cells. This leads to an increase in the permeability of the cell membrane to chloride ions, resulting in paralysis and death of the parasite. The pharmacodynamics of SKLICE Lotion are unknown.

12.2 Pharmacodynamics

The pharmacodynamics of SKLICE Lotion are unknown.

12.3 Pharmacokinetics

The absorption of ivermectin from SKLICE Lotion was evaluated in a clinical study in subjects aged from 6 months to 3 years. This study evaluated pharmacokinetics in 20 ivermectin-infested subjects, and 13 of these subjects weighed 15 kg or less (overall weight range 8.5-23.9 kg). All enrolled subjects received a single treatment with SKLICE Lotion. The systemic ivermectin exposure was evaluated using an assay with a lower limit of quantification of 0.05 ng/mL. The plasma maximum concentration (C$_{max}$) and area under the concentration-time curve from 0 to time of last measurable concentration (AUC$_{0-t}$) were 0.24 ± 0.23 ng/mL and 6.7 ± 11.2 hr•ng/mL, respectively. These levels are much lower than those observed following oral administration of 165 mcg/kg dose of ivermectin.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term studies in animals have not been performed to evaluate the carcinogenic potential of SKLICE Lotion or ivermectin.

Ivermectin was not genotoxic in vitro in the Ames test, the mouse lymphoma assay, or the unscheduled DNA synthesis assay in human fibroblasts. Ivermectin had no adverse effects on fertility in rats at repeated oral doses of up to 3.6 mg/kg/day.

14 CLINICAL STUDIES

Two identical multicenter, randomized, double-blind, vehicle-controlled studies were conducted in subjects aged 6 months of age and older with head lice infestation. All subjects received a single application of either SKLICE Lotion or vehicle control with instructions not to use a nit comb. For the evaluation of efficacy, the youngest subject from each household was considered to be the index subject of the household (N=268). Other enrolled infested household members received the same treatment as the youngest subject and were evaluated for safety parameters [see Adverse Reactions (6.1)].

The primary efficacy was assessed as the proportion of index subjects who were free of live lice at day 2 and through day 8 to the final evaluation 14 (±2) days following a single application. Subjects with live lice present at any time up to the final evaluation were considered treatment failures. Table 1 contains the proportion of subjects who were free of live lice in each of the two trials.

Table 1: Proportion of Subjects Free of Live Lice 14 Days After Treatment

<table>
<thead>
<tr>
<th>Study</th>
<th>Vehicle</th>
<th>SKLICE Lotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (n/N)</td>
<td>% (n/N)</td>
</tr>
<tr>
<td>Study 1</td>
<td>16.2% (12/74)</td>
<td>76.1% (54/71)</td>
</tr>
<tr>
<td>Study 2</td>
<td>18.9% (14/74)</td>
<td>71.4% (50/70)</td>
</tr>
</tbody>
</table>

15 PATIENT COUNSELING INFORMATION

"See FDA-approved patient labeling (Patient Information)."

Inform the patient and caregiver of the following instructions:

- Apply SKLICE Lotion to dry scalp and dry scalp hair.
- Avoid contact with eyes.
- Do not swallow SKLICE Lotion.
- Keep out of reach of children. Use on children should be under the direct supervision of an adult.
- For single use only: do not retreat.
- Discard tube after use.
- Wash hands after applying SKLICE Lotion.

Patient Information

SKLICE (sklice) (ivermectin) Lotion, 0.5% Important: For use on scalp hair and scalp only. Do not use SKLICE Lotion in your eyes, mouth or vagina.

Read the Patient Information that comes with SKLICE Lotion. This leaflet does not take the place of talking to your healthcare provider about your medical condition or treatment.

What is SKLICE Lotion?

SKLICE Lotion is a prescription medicine for topical use on the hair and scalp only. SKLICE Lotion is used to treat head lice in people 6 months of age and older.

It is not known if SKLICE Lotion is safe and effective for children under 6 months of age.

What should I tell my healthcare provider before I use SKLICE Lotion?

Before using SKLICE Lotion, tell your healthcare provider if you or your child:

- have any skin conditions or sensitivities,
- have any other medical conditions,
- are pregnant or plan to become pregnant. It is not known if SKLICE Lotion can harm your unborn baby, and
- are breastfeeding or plan to breastfeed. It is not known if SKLICE Lotion passes into your breast milk. Talk to your healthcare provider if you are breastfeeding.

How should I use SKLICE Lotion?

- Use SKLICE Lotion exactly as prescribed. Your healthcare provider will prescribe the treatment that is right for you. Do not change your treatment unless you talk to your healthcare provider.
- Use SKLICE Lotion when your hair is dry.
- It is important to use enough SKLICE Lotion to completely coat all of your hair and scalp. Leave SKLICE Lotion on your hair and scalp for a full 10 minutes. See the detailed “Patient Instructions for Use” at the end of this leaflet.
- You need to completely cover all the scalp and hair with lotion. Make sure that you and anyone who helps you apply SKLICE Lotion reads and understands this leaflet and the Patient Instructions for Use.
- Children will need an adult to apply SKLICE Lotion for them.
- Do not swallow SKLICE Lotion. If swallowed, call your healthcare provider or go to the nearest emergency room right away.
- Do not get SKLICE Lotion into your eyes. If SKLICE Lotion gets in your eye, gently flush with water.
- Wash your hands after applying SKLICE Lotion.

When you complete your dose of SKLICE Lotion, do not use SKLICE Lotion again without talking to your healthcare provider first.

What are the possible side effects of SKLICE Lotion?

The most common side effects of SKLICE Lotion include:

- eye redness or soreness
- eye irritation
- dandruff
- dry skin
- burning sensation of the skin

Tell your healthcare provider if you have any side effect that bothers you or that does not go away.

These are not all the possible side effects of SKLICE Lotion. For more information, ask your healthcare provider or pharmacist.

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

How should I store SKLICE Lotion?

- Store SKLICE Lotion at room temperature between 68° to 77°F (20° to 25°C).
- Do not freeze SKLICE Lotion.
- Safely throw away any unused SKLICE Lotion.

Keep SKLICE Lotion and all medicines out of reach of children.
What are the ingredients in SKLICE Lotion?
Active ingredient: ivermectin
Inactive ingredients: water, olive oil, oleyl alcohol, Crodalan AWS, lanolin alcohol, cyclomethicone, shea butter, sodium citrate, sorbitan tristearate, methylparaben, propylparaben, and citric acid

General Information about SKLICE Lotion
Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use SKLICE Lotion for a condition for which it was not prescribed. Do not give SKLICE Lotion to other people, even if they have the same symptoms you have. It may harm them. This Patient Information leaflet summarizes the most important information about SKLICE Lotion. If you would like more information, talk to your healthcare provider. You can also ask your healthcare provider or pharmacist for information about SKLICE Lotion that is written for health professionals.

Patient Instructions for Use
Before you use SKLICE Lotion, it is important that you read the Patient Information and these Patient Instructions for Use. Be sure that you read, understand, and follow these Patient Instructions for Use so that you use SKLICE Lotion the right way. Ask your healthcare provider or pharmacist if you have questions about the right way to use SKLICE Lotion.

- Your hair and scalp must be dry before applying SKLICE Lotion.

Figure A

- Use the top of cap to break the tamper seal on the tube (see Figure A).

Figure B Figure C Figure D

- Apply SKLICE Lotion directly to dry hair and scalp (see Figure B).
- Completely cover your scalp and hair closest to the scalp first, and then apply outwards towards the ends of your hair (see Figure C).
- Rub SKLICE Lotion throughout hair (see Figure D).
- It is important to completely cover your entire head so that all lice and eggs are exposed to the lotion. Be sure that each hair is coated from the scalp to the tip.
- Use up to 1 entire tube (4 oz) to completely cover hair and scalp.

Figure E Figure F

- Allow SKLICE Lotion to stay on your hair and scalp for 10 minutes after it has been applied. Use a timer or clock. Start timing after you have completely covered your hair and scalp with SKLICE Lotion (see Figure E).
- After 10 minutes, completely rinse SKLICE Lotion from your hair and scalp using only water (see Figure F).
- You or anyone who helps you apply SKLICE Lotion should wash their hands after application.
- Do not use SKLICE Lotion again without talking to your healthcare provider first.

How do I stop the spread of lice?
To help prevent the spread of lice from one person to another, here are some steps you can take:

- Avoid direct head-to-head contact with anyone known to have live, crawling lice.
- Do not share combs, brushes, hats, scarves, bandannas, ribbons, barrettes, hair bands, towels, helmets, or other hair-related personal items with anyone else, whether they have lice or not.
- Avoid sleepovers and slumber parties during lice outbreaks. Lice can live in bedding, pillows, and carpets that have recently been used by someone with lice.
- After finishing treatment with lice medicine, check everyone in your family for lice after one week. Be sure to talk to your healthcare provider about treatments for those who have lice.
- Machine wash any bedding and clothing used by anyone having lice. Machine wash at high temperatures (150°F) and tumble in a hot dryer for 20 minutes.

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

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Rx Only