JUBLIA® (efinaconazole) topical solution, 10%
KERYDIN™ (tavaborole) topical solution, 5%

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member’s specific benefit plan. This Pharmacy Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.

This Pharmacy Coverage Guideline provides information related to coverage determinations only and does not imply that a service or treatment is clinically appropriate or inappropriate. The provider and the member are responsible for all decisions regarding the appropriateness of care. Providers should provide BCBSAZ complete medical rationale when requesting any exceptions to these guidelines.

The section identified as “Description” defines or describes a service, procedure, medical device or drug and is in no way intended as a statement of medical necessity and/or coverage.

The section identified as “Criteria” defines criteria to determine whether a service, procedure, medical device or drug is considered medically necessary or experimental or investigational.

State or federal mandates, e.g., FEP program, may dictate that any drug, device or biological product approved by the U.S. Food and Drug Administration (FDA) may not be considered experimental or investigational and thus the drug, device or biological product may be assessed only on the basis of medical necessity.

Pharmacy Coverage Guidelines are subject to change as new information becomes available.

For purposes of this Pharmacy Coverage Guideline, the terms "experimental" and "investigational" are considered to be interchangeable.

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This Pharmacy Coverage Guideline does not apply to FEP or other states’ Blues Plans.

Information about medications that require precertification is available at www.azblue.com/pharmacy.

Some large (100+) benefit plan groups may customize certain benefits, including adding or deleting precertification requirements.

All applicable benefit plan provisions apply, e.g., waiting periods, limitations, exclusions, waivers and benefit maximums.

Precertification for medication(s) or product(s) indicated in this guideline requires completion of the request form in its entirety with the chart notes as documentation. All requested data must be provided. Once completed the form must be signed by the prescribing provider and faxed back to BCBSAZ Pharmacy Management at (602) 864-3126 or emailed to Pharmacyprecert@azblue.com. Incomplete forms or forms without the chart notes will be returned.
Criteria:

- **Criteria for initial therapy:** Jublia (efinaconazole) or Kerydin (tavaborole) is considered *medically necessary* and will be approved when **ALL** of the following criteria are met:

  1. Age of the individual is:
     - For Jublia: 18 years of age or older
     - For Kerydin: 12 years of age or older
  
  2. A confirmed diagnosis of onychomycosis of toenail(s) due to **EITHER** Trichophyton rubrum or *Trichophyton mentagrophytes* as the causative organism

  3. Confirmed diagnosis using both of the following:
     - Positive potassium hydroxide (KOH) on microscopy
     - Positive fungal culture

  4. Failure, contraindication or intolerance to **BOTH**:
     - Terbinafine
     - Itraconazole

*Initial approval duration:* 12 months

- **Criteria for continuation of coverage (renewal request):** Jublia (efinaconazole) or Kerydin (tavaborole) is considered *medically necessary* and will be approved when **ALL** of the following criteria are met:

  1. Individual experienced a recurrent episode (a relapse or reinfection) of symptomatic confirmed diagnosis of onychomycosis of toenail(s) due to **EITHER** Trichophyton rubrum or *Trichophyton mentagrophytes* as the causative organism

  2. Confirmed diagnosis using both of the following:
     - Positive potassium hydroxide (KOH) on microscopy
     - Positive fungal culture

  3. The indication for use is one that requires a longer duration than the usual duration and the other alternatives as listed in the criteria for initial therapy section cannot be used

  4. Individual has been adherent with the medication

*Renewal duration:* 12 months
JUBLIA® (efinaconazole) topical solution, 10%
KERYDIN™ (tavaborole) topical solution, 5%

**Description:**

Jublia (efinaconazole) topical solution is an azole (triazole class) antifungal agent indicated for the treatment of onychomycosis of the toenails due to *Trichophyton rubrum* and *Trichophyton mentagrophytes*. Kerydin (tavaborole) topical solution is an oxaborole antifungal agent indicated for the treatment of onychomycosis of the toenails due to *Trichophyton rubrum* and *Trichophyton mentagrophytes*.

Jublia (efinaconazole) inhibits fungal lanosterol 14-alpha demethylase that is involved in the biosynthesis of ergosterol, an integral component of fungal cell membrane. Safety and effectiveness in pediatric individuals has not been established.

Kerydin (tavaborole) inhibits fungal protein synthesis by inhibiting aminoacyl-transfer ribonucleic acid (tRNA) synthetase (AARS). Safety and effectiveness in pediatric individuals has not been established.

Coverage is dependent on individual member plan benefit.

**Onychomycosis:**

- Onychomycosis is a common dermatological condition

- It is an infection of the nail apparatus caused by fungi that include dermatophytes, non-dermatophyte molds and yeasts (mostly Candida species)

- The toenails are affected in 80% of cases
  - Dermatophyte infection due to *Trichophyton rubrum* and/or *Trichophyton mentagrophytes* are the cause in over 90% of cases

- Onychomycosis is characterized by thickening of the distal end of the nail associated with some loosening or separation of the nail plate from the nail bed (onycholysis), and buildup of debris in the space created by the onycholysis (subungual hyperkeratosis)
  - The nail plate turns yellow and vertical bands appear at the distal end of the nails
  - These foot infections are not life-threatening but it may cause discomfort and pain

- Onychomycosis may be classified clinically as:
  - Distal and lateral subungual onychomycosis (DLSO)
    - Accounts for the majority of cases and is almost always due to dermatophyte infection
  - Superficial white onychomycosis (SWO)
    - Nearly always due to a dermatophyte infection, most commonly *Trichophyton mentagrophytes*
    - It is much less common than DLSO
  - Proximal subungual onychomycosis (PSO)
  - Candidal onychomycosis
  - Total dystrophic onychomycosis
  - Any of these may eventually progress to total nail dystrophy where the nail plate is almost completely destroyed
Only about 50% of nail dystrophy cases are caused by fungi making it important to establish the cause to rule out other conditions with similar presentations such as psoriasis and nail trauma. Despite this, most onychomycosis is treated based on clinical presentation alone. Treatment should be initiated only with mycological confirmation of infection.

- Laboratory diagnosis consists of direct microscopy to visualize fungal elements in the nail sample and culture to identify the species.

- **Approaches to treatment:**
  - The relative efficacy of different antifungal agents against different fungi is not completely understood and is poorly described due to use of different doses and dose scheduling, differing endpoints in the clinical studies, length of treatment, and lack of active comparisons.
  - A common surrogate measure of efficacy is mycologic cure rate defined as having negative potassium hydroxide (KOH) on microscopy and negative fungal culture.
  - Another measure used to assess efficacy is complete cure which is defined as no clinical involvement of the target nail or a mycologic cure defined as negative KOH and negative culture.
  - Mycologic cure rates are numerically better than clinical cure rates and as a result may overemphasize efficacy of treatment.
  - The goal of treatment is to eradicate the causative organism as demonstrated by microscopy and culture.
  - All treatments for onychomycosis have relatively high failure rates.
  - Recurrence rates range from approximately 20-50%.

- **Treatment options:**
  - Topical and oral agents are available for the treatment of fungal nail infections.
  - Treatment duration with these agents is usually months.
  - There are no clinical trials that compare oral antifungal agents to topical agents.
    - However, oral agents appear to achieve higher mycological cures than those seen with topical agents.
    - A meta-analysis of onychomycosis treatments found the risk of severe liver injury or asymptomatic elevations of serum transaminases with all agents to be less than 2%.
  - Topical antifungal preparations available both as prescription only medicines and over-the-counter products.
  - Topical therapy may be useful for the treatment of SWO and in very early cases of DLSO where the infection may be confined to the distal edge of the nail.
  - Systemic therapy is more successful than topical treatment.
  - Agents used to treat onychomycosis include:
    - Oral Terbinafine
      - The most effective agent and is considered first line treatment.
      - When used continuously the mycologic cure rate is 76%.
      - When used intermittently the mycologic cure rate is 59%.
    - Oral Itraconazole
      - Is recommended when Terbinafine cannot be used due to failure or intolerance.
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- It has a mycologic cure rate of 63% with pulse dosing and 59% with continuous dosing
  - Oral Fluconazole (for Candida species)
  - Topical Jublia (efinaconazole)
    - The absolute mycologic cure rate for Jublia is 36.5-38.4% (Jublia package insert)
  - Topical Kerydin (tavaborole)
    - The absolute mycologic cure rate for Kerydin is 23.7-23.9 (Kerydin package insert)
  - Topical Ciclopirox nail lacquer
    - The absolute mycologic cure rate for topical Ciclopirox is 18-27% (package insert Penlac)

Resources:

Jublia (efinaconazole) product information accessed 09-12-19 at DailyMed
Kerydin (tavaborole) product information accessed 09-12-19 at DailyMed


UpToDate: Onychomycosis: Epidemiology, clinical features, and diagnosis. Current through Sep 2017
UpToDate: Onychomycosis: Management. Current through Sep 2017