Drug Monograph

Drug/Drug Class:	**Eucrisa® (crisaborole) ointment/ Topical Immunomodulators**
Prepared for:	MO HealthNet
Prepared by:	Conduent

☒ **New Criteria** ☐ **Revision of Existing Criteria**

Executive Summary

Purpose:	The purpose of this monograph is to provide a review of new therapy to determine whether the reviewed drug should be made available on an open access basis to prescribers, require a clinical edit or require prior authorization for use.
Dosage Forms & Manufacturer:	Eucrisa® is available in a topical ointment that contains 20 mg of crisaborole per gram (2%). It is available in 60 gram and 100 gram laminate tubes. Manufacturer: Anacor Pharmaceuticals, Inc., Palo Alto, CA 94303
Summary of Findings:	Eucrisa® treatment for 28 days significantly increased the proportion of patients achieving the Investigator Status Global Assessment (IGSA) score of clear or almost clear with at least a 2-grade improvement from baseline when compared to a vehicle control in 2 large, randomized studies in patients with mild to moderate atopic dermatitis. Eucrisa® treatment for 28 days improved all signs of atopic dermatitis including erythema, exudation, excoriation, induration or papulation, and lichenification.
Status Recommendation:	☐ Prior Authorization (PA) Required ☐ Open Access ☐ Clinical Edit ☒ PDL
Type of PA Criteria:	☐ Increased Risk of ADE ☐ Preferred Agent ☐ Appropriate Indications ☒ Under Solicitation

Purpose

The purpose of this monograph is to provide a review of new therapy to determine whether the reviewed drug should be considered a prior authorization drug, a clinical edit drug or an open access drug. While prescription expenditures are increasing at double-digit rates, payers are evaluating ways to control these costs by influencing prescriber behavior and guide appropriate medication usage. This review will assist in the achievement of qualitative and economic goals related to health care resource utilization. Restricting the use of certain medications can reduce costs by requiring documentation of appropriate indications for use, and where appropriate, encourage the use of less expensive agents within a drug class.

Introduction [3]

Atopic dermatitis (AD) is the most common type of eczema and occurs in 17.8 million Americans. AD often appears as a red, itchy rash normally on the cheeks, arms and legs. AD typically begins in childhood, usually in the first six months of a baby's life. Even though it's the most common form of eczema, it's also the most severe and long lasting. Often, AD disappears as a child grows older, though some children will continue to experience AD into adulthood.

Dosage Form(s) [1]

Eucrisa® is available in a topical ointment that contains 20 mg of crisaborole per gram (2%). It is available in 60 gram and 100 gram laminate tubes.

Manufacturer [1]

Anacor Pharmaceuticals, Inc., Palo Alto, CA 94303

Indication(s) [1]

Eucrisa® is indicated for the treatment of mild to moderate atopic dermatitis in adults and children 2 years or older.

Clinical Efficacy [1,2] (mechanism of action/pharmacology, comparative efficacy)

Eucrisa® is a PDE-4 inhibitor, which increases intracellular cyclic adenosine monophosphate (cAMP) levels.

Pharmacokinetics:

	Eucrisa®
Protein Binding	97%
Metabolism	Via hydrolysis and oxidation to inactive metabolites
Elimination	Renal

Atopic Dermatitis

In 2 clinical trial studies, treatment with 28 days of crisaborole improved signs and symptoms of atopic dermatitis compared with a vehicle control in adults and children

STUDY DESIGN	Two randomized, double-blind, vehicle-controlled clinical trials (Study 1,

	N=759; Study 2, N=763)
INCLUSION CRITERIA	Patient 2 years or older with mild to moderate atopic dermatitis
EXCLUSION CRITERIA	Biologic therapy or systemic corticosteroids within 28 days; topical corticosteroids or topical calcineurin inhibitors within 14 days
TREATMENT REGIMEN	Patients were randomized 2:1 to receive topical Eucrisa® ointment or vehicle applied twice daily to affected area(s) for 28 days.
RESULTS	Eucrisa® treatment for 28 days significantly increased the proportion of patients achieving an IGSA score of clear or almost clear with at least a 2-grade improvement from baseline compared with vehicle only (Study 1, 32.8% vs 25.4%; Study 2, 31.4% vs 18%). In an analysis of pooled data, Eucrisa® significantly improved all signs of atopid dermatitis including erythema (59% vs 40%), exudation (40% vs 30%), excoriation (60% vs 48%), induration or papulation (55% vs 48%), and lichenification (52% vs 41%).
SAFETY	Eucrisa® was well tolerated. Application site pain (4%) was the only adverse event that occurred in at least 1% of patients.

Contraindications (1)

- Hypersensitivity to Eucrisa® or any component of the product

Warnings and Precautions (1)

- Hypersensitivity reactions, including urticaria, have been reported

Adverse Effects (1)

Most common, ≥ 1%	**Eucrisa® (n=1012)**	**Vehicle (n=499)**
Application Site Pain	4%	1%

Drug Interactions (1)

- No clinically significant drug interactions have been identified

Dosage and Administration (1)

The FDA recommended dose is to apply thin layer topically to affected area(s) twice daily

Cost

GENERIC NAME	BRAND NAME	MANUFACTURER	STRENGTH	PACKAGE	COST/ PACKAGE*
Crisaborole	Eucrisa	Anacor	2%	60 g tube	$579.60

*Wholesale Acquisition Cost

Conclusion

Eucrisa® is a novel topical PDE-4 inhibitor indicated for the treatment of mild to moderate atopic dermatitis in adults and children 2 years or older. In 2 randomized trials, treatment for 28 days with Eucrisa® compared with a vehicle control significantly increased the proportion of patients achieving an IGSA score of clear or almost clear. It also improved all signs of atopic dermatitis including erythema, exudation, excoriation, induration/papulation, and lichenification. Eucrisa® is well tolerated, with application site pain as the most common adverse event during clinical trials.

Recommendation

This drug is being considered for inclusion in the state specific Preferred Drug List (PDL).

References

1) Product Information: Eucrisa™, crisaborole ointment. Anacor Pharmaceuticals, Inc, Pal Alto, CA, 12/2016
2) Paller AS, Tom WL, Lebwohl MG et al: Efficacy and safety of crisaborole ointment, a novel, nonsteroidal phosphodiesterase 4 (PDE4) inhibitor for the topical treatment of atopic dermatitis (AD) in children and adults. J Am Acad Dermatol 2016; 75(3): 494-503.
3) Understanding your atopic dermatitis. Retrieved 5/17/2017 from https://nationaleczema.org/eczema/types-of-eczema/atopic-dermatitis/

Prepared by: Luke Boehmer PharmD

Date: May 17, 2017

