BlueCross BlueShield of Arizona
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PHARMACY COVERAGE GUIDELINES
SECTION: DRUGS

ORIGINAL EFFECTIVE DATE: 11/15/18
LAST REVIEW DATE: 11/15/18
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ARCHIVE DATE:

SUCRAID® (sacrosidase) oral solution

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.

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.**

SUCRAID® (sacrosidase) oral solution (cont.)

Criteria:

- **Criteria for initial therapy:** Sucraid (sacrosidase) is considered ***medically necessary*** and will be approved when **ALL** of the following criteria are met:

  1. Prescriber is a Pediatric Gastroenterologist or Specialist in Genetic Disorders
  2. Individual is 5 months of age or older
  3. A confirmed diagnosis of congenital sucrase-isomaltase deficiency (CSID) in an individual having osmotic (watery) fermentative diarrhea
  4. Individual has been adherent with a sucrose free, low starch diet
  5. Individual has failure, contraindication or intolerance to Lyophilized Baker's yeast (*Saccharomyces cerevisiae*)
  6. Individual does not have secondary (acquired) disaccharidase deficiencies
  7. **ALL** of the following baseline tests have been completed before initiation of treatment with continued monitoring as clinically appropriate:
     - Small bowel biopsy
     - Normal lactose breath hydrogen test
  8. Small bowel biopsy shows **ALL** of the following:
     - Normal villous architecture
     - Absent or markedly reduced sucrase activity
     - Isomaltase (palatinase) activity ranging from no to full activity
     - Normal or reduced maltase activity
     - Normal lactase activity or a sucrase:lactase ratio of < 1 if have reduced lactase
  9. There are **NO** contraindications.
     - Contraindications include:
       - Hypersensitivity to yeast, yeast products, glycerin (glycerol), or papain

  Initial approval duration: 1 box (containing 2 bottles) per month x 3 months

- **Criteria for continuation of coverage (renewal request):** Sucraid (sacrosidase) is considered ***medically necessary*** and will be approved when **ALL** of the following criteria are met:

  1. Individual continues to be seen by Pediatric Gastroenterologist or Specialist in Genetic Disorders
  2. **Medical record documentation of a routine re-evaluation of continued need for the medication, as affected individuals tend to experience spontaneous improvement of their symptoms with age, because colonic bacteria become able to metabolize non-absorbed carbohydrates into organic**

SUCRAID® (sacrosidase) oral solution (cont.)

acids (lactic acid and short chain fatty acids), most of which are then absorbed (*Documentation of re-evaluation must be sent with renewal requests*)

3. Individual's condition responded while on therapy
   - Response is defined as at least a 50% reduction in **ALL** of the following:
     - Symptoms of abdominal pain, cramps, bloating, gas, vomiting
     - Number of stools per day
     - Watery, loose stool consistency
     - Number of symptomatic days

4. Individual has been adherent with the medication

5. Individual continues to be adherent with a sucrose free, low starch diet

6. Individual does not have secondary (acquired) disaccharidase deficiencies

7. Individual has not developed any contraindications or other significant level 4 adverse drug effects that may exclude continued use
   - Contraindications as listed in the criteria for initial therapy section
   - Significant adverse effect such as:
     - Severe wheezing

8. There are no significant interacting drugs

Renewal duration: 1 box (containing 2 bottles) per month x 6 months

Description:

Sucraid (sacrosidase) chemically is beta D-fructofuranoside fructohydrolase. Sacrosidase is derived from Baker's yeast (*Saccharomyces cerevisiae*) that hydrolyzes sucrose. Sucraid (sacrosidase) is indicated as oral replacement therapy of genetically determined sucrase deficiency, which is part of congenital sucrase-isomaltase deficiency (CSID). The effects of sacrosidase have not been evaluated in patients with secondary (acquired) disaccharidase deficiencies. Sucraid (sacrosidase) does not contain isomaltase.

CSID is a carbohydrate intolerance disorder characterized by malabsorption of oligosaccharides and disaccharides. It is also known as disaccharide intolerance I, congenital sucrase-isomaltose malabsorption, congenital sucrose-isomaltose malabsorption, SI deficiency, sucrose-isomaltase deficiency, sucrase-isomaltase deficiency, and congenital sucrose intolerance. It is an autosomal recessive disorder. Onset usually occurs during infancy after weaning from breast milk or lactose-only formula onto foods containing sucrose or starch. Clinical manifestations include osmotic-fermentative diarrhea, abdominal distension and discomfort, flatulence and vomiting. Severe symptoms may lead to failure to thrive, dehydration and malnutrition. The gastrointestinal symptoms associated with CSID are nonspecific; the diagnosis is often delayed and patients can be misdiagnosed with irritable bowel syndrome, cystic fibrosis, celiac disease or other causes of chronic diarrhea.

SUCRAID® (sacrosidase) oral solution (cont.)

With CSID there is complete or almost complete lack of endogenous sucrase activity, marked reduction in isomaltase activity, moderate decrease in maltase activity, and normal lactase levels. Sucrase is naturally produced in the brush border of the small intestine, primarily the distal duodenum and jejunum. Sucrase hydrolyzes sucrose (a disaccharide) into its component monosaccharides, glucose and fructose. Isomaltase breaks down disaccharides from starch into simple sugars.

In the absence of endogenous human sucrase, sucrose is not metabolized. Unhydrolyzed sucrose and starch are not absorbed from the intestine and their presence in the intestinal lumen leads to osmotic retention of water resulting in loose watery stools. Unabsorbed sucrose in the colon is fermented by bacterial flora to produce increased amounts of hydrogen, methane, and water resulting in excessive gas, bloating, abdominal cramps, nausea, and vomiting.

CSID is inherited as an autosomal recessive genetic trait. The faulty gene has been identified to chromosome 3 (3q25-q26). The *SI* gene provides instructions for producing the enzyme sucrase-isomaltase. Mutations that cause this condition alter the structure, disrupt the production, or impair the function of sucrase-isomaltase. More than 25 mutations within the human sucrase gene are responsible for these CSID phenotypes. Sucrase-isomaltase variants can occur on either sucrase or isomaltase subunits, resulting in varied effects on sucrase-isomaltase enzyme activity.

CSID is difficult to diagnose. Approximately 4-10% of pediatric patients with chronic diarrhea of unknown origin have CSID. Several tests can be used to diagnose CSID tests but when used alone may be inaccurate.

Stool pH < 6 is not always a reliable screening test for the diagnosis of sugar malabsorption as stools with a pH < 6 may not have sugar detected and stools with a pH > 6 may have substantial amount of sugar present.

A hydrogen breath test or a sucrose hydrogen breath test showing an increase in breath hydrogen after a sucrose challenge is not specific for CSID; the test may have a high incidence of false-positive results due to villous injury, dumping syndrome, and the presence of small bowel bacterial overgrowth (SIBO) where unabsorbed sugar is converted to hydrogen gas by colonic bacteria.

Use of a differential urinary disaccharide ratio of sucrose to lactulose relies on obtaining an accurate 10-hour urine collection.

A sucrose breath test for screening and confirmation of CSID using a novel non-invasive ^{13}C-sucrose labeled substrate has been developed and validated, and is said to be accurate and specific for CSID, however getting breath samples may be difficult in small children. ^{13}C-sucrose breath testing with infrared spectrophotometry, requires 2 breath tests (one with labeled ^{13}C-sucrose and another with labeled ^{13}C-glucose) $^{13}CO_2$-enriched breath samples are collected for each. The results are expressed as a coefficient of glucose oxidation (CGO) and using a cutoff of < 79% CGO, it yields 100% sensitivity and specificity for CSID. But secondary sucrase deficiency cannot be excluded without clinical evaluations and biopsy.

The definitive test for diagnosis of CSID is the measurement of intestinal disaccharidases following small bowel biopsy. The small bowel biopsy should show normal villous architecture. The biopsy specimens should be assessed for lactase, sucrase, isomaltase (palatinase) & maltase activities. The activity assay should show complete or almost complete lack of endogenous sucrase activity, variable isomaltase activity that ranges from no activity to full activity, decrease in maltase activity, and normal lactase levels (within 1 standard deviation of the mean) or a sucrase:lactase ratio of < 1 in the setting of reduced lactase. In addition there should be a normal

SUCRAID® (sacrosidase) oral solution (cont.)

lactose breath hydrogen test to rule out a diagnose lactose intolerance. It is important to rule out secondary (or acquired) forms of disaccharidase deficiencies as the effects of Sucraid (sacrosidase) have not been evaluated in these patients with secondary (acquired) disaccharidase deficiencies.

Treatment of CSID involves following a strict sucrose- and starch-restricted diet, and an oral solution of Baker's yeast-derived enzyme replacement.

Table 1 Potential causes of secondary or acquired sucrase-isomaltase deficiency or maldigestion

Villous atrophy or alteration
Celiac disease
Non-tropical sprue
Chemotherapy and radiation enteropathy
Crohn's disease
Allergic enteropathy
Immunodeficiency
Malnutrition
Infection
Acute gastroenteritis
Giardiasis
Tropical sprue
HIV enteropathy
Small intestinal bacterial overgrowth
Rapid transit
Rapid gastric emptying
Chronic nonspecific diarrhea
Dumping syndrome
Ulcerative, microscopic, and lymphocytic colitis

SUCRAID® (sacrosidase) oral solution (cont.)

Resources:

Sucraid (sacrosidase) product information accessed 09-25-18 at DailyMed: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=d613bb7f-c3f4-462e-81a2-da2347cc4b6b

Cohen SA. The clinical consequences of sucrase-isomaltase deficiency. Molecular Cellular Ped 2016; 3:5

Santos-Silva R, Tavares M, Trindade E, Amil-Dias J. Congenital sucrase-isomaltase deficiency: A case report. Port J Gastroenterol 2014; 21 (6):250-253

Treem WR. Clinical aspects and treatment of congenital sucrase-isomaltase deficiency. J Ped Gastro Nutr 2012; 55 (Sup 2 Nov): S7-S13

Robayo-Torres CC, Opekun AR, Quezada-Calvillo R, et. al.: ^{13}C-breath test for sucrose digestion in congenital sucrase-isomaltase deficient and sacrosidase supplemented patients. J Ped Gastro Nutr 2009; 48: 412-418

Rahhal R, Bishop WP: SacrosidaseTrial in Chronic Nonspecific Diarrhea in Children. The Open Ped Med J 2008; 2: 35-38

Treem WR, McAdams L, Stanford L, et al.: Sacrosidase therapy for congenital sucrase-isomaltase deficiency. J Ped Gastroent Nutr 1999; 28 (2):137-142

Treem WR, Ahsan N, Sullivan B, et al.: Evaluation of liquid yeast-derived sucrase enzyme replacement in patients with sucrose-isomaltase deficiency. Gastroenterol 1993; 105: 1061-1068

Soeparto P, Stobo EA, Walker-Smith JA. Role of chemical examination of the stool in diagnosis of sugar malabsorption in children. Arch Dis Childhood 1972; 47: 56-91

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Fax completed prior authorization request form to 602-864-3126 or email to pharmacyprecert@azblue.com.
Call 866-325-1794 to check the status of a request.
All requested data must be provided. **Incomplete forms or forms without the chart notes will be returned.**
Pharmacy Coverage Guidelines are available at www.azblue.com/pharmacy.

Pharmacy Prior Authorization Request Form

Do not copy for future use. Forms are updated frequently.
REQUIRED: Office notes, labs, and medical testing relevant to the request that show medical justification are required.

Member Information

Member Name (first & last):	Date of Birth:	Gender:	BCBSAZ ID#:
Address:	City:	State:	Zip Code:

Prescribing Provider Information

Provider Name (first & last):	Specialty:	NPI#:	DEA#:
Office Address:	City:	State:	Zip Code:
Office Contact:	Office Phone:	Office Fax:	

Dispensing Pharmacy Information

Pharmacy Name:	Pharmacy Phone:	Pharmacy Fax:

Requested Medication Information

Medication Name:	Strength:	Dosage Form:
Directions for Use:	Quantity: / Refills:	Duration of Therapy/Use:

☐ Check if requesting **brand** only ☐ Check if requesting **generic**

☐ Check if requesting continuation of therapy (prior authorization approved by BCBSAZ expired)

Turn-Around Time For Review

☐ Standard ☐ Urgent. Sign here: _____ ☐ Exigent (requires prescriber to include a written statement)

Clinical Information

1. **What is the diagnosis? Please specify below.**

   ICD-10 Code: _____ **Diagnosis Description:** _____

2. ☐ Yes ☐ No **Was this medication started on a recent hospital discharge or emergency room visit?**

3. ☐ Yes ☐ No **There is absence of ALL contraindications.**

4. **What medication(s) has the individual tried and failed for this diagnosis? Please specify below.**
Important note: Samples provided by the provider are not accepted as continuation of therapy or as an adequate trial and failure.

Medication Name, Strength, Frequency	Dates started and stopped or Approximate Duration	Describe response, reason for failure, or allergy

5. **Are there any supporting labs or test results? Please specify below.**

Date	Test	Value

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Pharmacy Prior Authorization Request Form

6. Is there any additional information the prescribing provider feels is important to this review? Please specify below.
For example, explain the negative impact on medical condition, safety issue, reason formulary agent is not suitable to a specific medical condition, expected adverse clinical outcome from use of formulary agent, or reason different dosage form or dose is needed.

Signature affirms that information given on this form is true and accurate and reflects office notes

Prescribing Provider's Signature: Date:

Please note: Some medications may require completion of a drug-specific request form.

Incomplete forms or forms without the chart notes will be returned.

Office notes, labs, and medical testing relevant to the request that show medical justification are required.