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Last P&T Approval/Version: 01/25/2023
Next Review Due By: 01/2024
Policy Number: C5774-A

Gattex (teduglutide [rDNA origin])

PRODUCTS AFFECTED

Gattex (teduglutide)

COVERAGE POLICY

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.
This 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 Molina Healthcare complete medical rationale when requesting any exceptions to these guidelines.

Documentation Requirements:
Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

DIAGNOSIS:
Short bowel syndrome

REQUIRED MEDICAL INFORMATION:
This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. If a drug within this policy receives an updated FDA label within the last 180 days, medical necessity for the member will be reviewed using the updated FDA label information along with state and federal requirements, benefit being administered and formulary preferencing. Coverage will be determined on a case-by case basis until the criteria can be updated through Molina Healthcare, Inc. clinical governance. Additional information may be required on a case-by-case basis to allow for adequate review.

A. SHORT BOWEL SYNDROME:
1. Diagnosis of short bowel syndrome
   AND
2. Documentation of an initial nutritional assessment completed by a registered dietitian who has determined that oral/enteral nutrition is not sufficient to meet nutritional goals. Prescriber to submit completed nutritional assessment. [DOCUMENTATION REQUIRED]
   AND

3. (a) Documentation adult member had a dependence on parenteral nutrition documented by BOTH of the following: (a) Dependent on parenteral nutrition (PN) and/or intravenous (IV) fluids at least 12 consecutive months continuously AND (b) Three (3) or more days per week of parenteral nutrition support (fluids, electrolytes and/or nutrients)
   OR
   (b) Documentation pediatric member (less than 18 years of age) is receiving intravenous nutrition/fluids to account for at least 30% of caloric and/or fluid/electrolyte needs
   AND
4. Documentation of member's current weight (within the last 30 days) AND member weighs at least 10kg
   AND
5. Documentation of the ALL of following within 6 months prior to starting therapy (per FDA label):
   (a) Adults: Perform a colonoscopy with removal of polyps
   OR
   Pediatric members: Perform fecal occult blood testing; if there is unexplained blood in the stool, perform colonoscopy/sigmoidoscopy.
   AND
   (b) Obtain baseline laboratory assessments (bilirubin, alkaline phosphatase, lipase, and amylase)
   AND
6. Prescriber attests the member does not have history of colorectal or other GI malignancy, or intestinal or stoma obstruction
   AND
7. Documented clinically significant failure/intolerance/contraindication to BOTH of the following: an antimotility agent (e.g., loperamide [Imodium], diphenoxylate/atropine [Lomotil]) or for pediatric requests any other agent to control stool output (e.g., fiber, cholestyramine), AND an antisecretory agent (i.e., PPI, H2 blocker, octreotide [Sandostatin])

CONTINUATION OF THERAPY:

A. SHORT BOWEL SYNDROME:

1. Adherence to therapy at least 85% of the time as verified by Prescriber and member's medication fill history (review Rx history for compliance)
   AND
2. Documentation of positive response to therapy as evidenced by one of the following: Documentation of a decrease in parenteral support (i.e. parenteral nutrition and/or intravenous fluids) decreased in volume (ml) from baseline weekly requirement (prior to initiation of Gattex therapy) OR Documentation of reduction in the numbers of days of required parenteral nutrition support OR With continued treatment, Prescriber has a reasonable expectation that this member can be removed from parenteral support within the next 6 months
   AND
3. Prescriber attests to or clinical reviewer has found no evidence of intolerable adverse effects or drug toxicity
   AND
4. CONTINUATION BEYOND 1 YEAR OF TREATMENT: Prescriber attests to performing fecal occult blood testing and/or colonoscopy/sigmoidoscopy at the end of one year of treatment and at least every 5 years thereafter as recommended per FDA labeling.

DURATION OF APPROVAL:

Initial authorization: 6 months, Continuation of therapy: 6 months

PRESCRIBER REQUIREMENTS:

Prescribed by a Board-certified gastroenterologist who is a certified REMS provider

AGE RESTRICTIONS:
1 year of age or older

QUANTITY:
0.05 mg/kg once daily
Thirty (30) vials per 30 days. A maximum supply of 30 days will be dispensed at a time.

PLACE OF ADMINISTRATION:
The recommendation is that injectable medications in this policy will be for pharmacy benefit coverage and patient self-administered.

DRUG INFORMATION

ROUTE OF ADMINISTRATION:
Subcutaneous

DRUG CLASS:
Glucagon-Like Peptide-2 (GLP-2) Analogs

FDA-APPROVED USES:
Gattex (teduglutide) is indicated for the treatment of adults and pediatric patients 1 year of age and older with Short Bowel Syndrome (SBS) who are dependent on parenteral support

COMPENDIAL APPROVED OFF-LABELED USES:
None

APPENDIX

APPENDIX:
None

BACKGROUND AND OTHER CONSIDERATIONS

BACKGROUND:
Short Bowel Syndrome (ADULT)
Short Bowel Syndrome (SBS) occurs when, after surgery or congenitally, a patient is left with < 200 cm of functional small intestine. Absorption is related to the amount of residual intestine; patients at greatest nutritional risk generally have a duodenostomy or a jejunoileal anastomosis with < 35 cm of residual small intestine, jejunocolic or ileocolic anastomosis with < 60 cm of residual small intestine, or an end jejunostomy with < 115 cm of residual small intestine.
The removal or loss of a segment of the small intestine does not necessarily result in SBS.
Often, additional factors play a role in the eventual development of the disorder. These factors include:

- The specific segment of the intestines that is lost
- The remaining length of the small intestines
- Whether the colon is intact
- Whether the valve at the junction of the small and large intestines (ileocecal valve) is intact
- The presence of any underlying disease
- The age and overall health of the individual

Also, with appropriate rehabilitation, the remaining healthy small intestine will undergo a process of adaption with time, and the intestinal lining may grow larger (hypertrophy) and ultimately absorb more,

which may lessen an individual's particular symptoms.
The most important aspects of medical management of SBS are to provide adequate macro and micronutrients and fluid to prevent energy malnutrition, specific nutrient deficiencies and dehydration, and correction and prevention of acid-base disturbances.
Treatment includes glucose-polymer-based oral rehydration solutions (ORS) to decrease dehydration and total parenteral nutrition (TPN) in patients with residual jejunum ending in a jejunostomy. For patients with residual colon in continuity, ORS may still be of value provided sufficient sodium is present in the diet. For patients with no remaining jejunum, who have residual ileum, the presence of glucose in the ORS is not critical because ileal water absorption is not affected by the presence of glucose

Conventional treatments include dietary manipulations, oral rehydration solutions, antidiarrheal and antisecretory treatments. Pharmacologic management of SBS may include use of anti-motility agents (e.g., loperamide and diphenoxylate), or antisecretory agents that reduce gastric acid secretion (e.g., H2 receptor antagonists, proton pump inhibitors, somatostatin analog). Recombinant growth hormone (somatropin, ZORBTIVE™) is approved for the treatment of SBS (for up to 4 weeks) in patients receiving specialized nutritional support, based on reductions in caloric content and frequency of administration of parenteral nutrition with treatment compared to placebo. Glutamine (NUTRESTORE™) is also approved for the treatment of SBS (for up to 16 weeks) in patients receiving specialized nutritional support when used in conjunction with a recombinant human growth hormone that is approved for this indication. Comparator trials with Gattex (teduglutide) were not found.

Based on a Cochrane systematic review of treatment with human growth hormone with or without glutamine in patients with SBS, it was noted that treatment increased weight and energy absorption. The authors noted the limitation that the benefits returned to baseline after discontinuation of therapy and conclusive evidence is not available to recommend this treatment. Further studies that evaluate human growth hormone treatment during the immediate phase of bowel adaptation are needed.

The current AGA guidelines (2022) recognize teduglutide can improve intestinal absorptive function and allow parenteral nutrition weaning in patients with SBS. They recommend teduglutide be used only after optimizing diet and conventional SBS treatments.

Short Bowel Syndrome (PEDIATRICS)
The recommended definition of SBS is the need for parenteral nutrition for >60 days after intestinal resection or a bowel length of <25% of expected. It is further recommended that patients who meet one or both of these criteria have access to an Intestinal Rehabilitation Program for consultation or clinical management.

Teduglutide is an analog of naturally occurring human glucagon-like peptide-2 (GLP-2), a peptide secreted by L-cells of the distal intestine. Endogenous GLP-2 is a 33-amino peptide gastrointestinal, trophic hormone involved in the structural and functional repair and regeneration of intestinal cells. Gattex (teduglutide [rDNA origin]) differs from GLP-2 through the substitution of one amino acid. However, endogenous GLP-2 is rapidly degraded by dipeptidyl peptidase-IV (DDP-IV) resulting in a half- life of only 7 minutes. Teduglutide is created in Escherichia coli, and differs from human GLP-2 by the substitution of glycine for alanine at position 2. As a result, teduglutide is resistant to DDPIV degradation, thereby increasing the half-life and allowing for once daily subcutaneous administration. Teduglutide improves bowel function by enhancing absorption of nutrients and fluids and decreases dependence on parenteral nutrition.

Gattex (teduglutide) is currently indicated for the treatment of adult and pediatric patients with Short Bowel Syndrome (SBS) who are dependent on parenteral support. Gattex received Orphan Drug designation on June 29, 2000 and subsequently submitted a new drug application (NDA) to the Food and Drug Administration (FDA) on 30 November 2011, seeking approval for the treatment of adult patients with Short Bowel Syndrome (SBS) to improve intestinal absorption of fluid and

nutrients. Gattex (teduglutide) is the first in its class with this mechanism of action.

CONTRAINDICATIONS/EXCLUSIONS/DISCONTINUATION:
All other uses of Gattex (teduglutide) are considered experimental/investigational and therefore, will follow Molina's Off- Label policy. Contraindications to Gattex (teduglutide) include: No labeled contraindications.

OTHER SPECIAL CONSIDERATIONS:
None

CODING/BILLING INFORMATION

Note: 1) This list of codes may not be all-inclusive. 2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement

HCPCS CODE	DESCRIPTION
NA	

AVAILABLE DOSAGE FORMS:
Gattex-single-use vial kit (containing 5mg of teduglutide) and a kit containing 30 single-use vials

REFERENCES

1. Gattex [package insert]. Lexington, MA: Shire-NPS Pharmaceuticals, Inc.; October 2022
2. Jeppesen P, Pertkiewicz M, Messing B, et al. Teduglutide reduces need for parenteral support among patients with short bowel syndrome with intestinal failure. Gastroenterology.2012; 143:1473-1481.
3. American Gastroenterological Association medical position statement: Short bowel syndrome and intestinal transplantation. Gastroenterology, Volume 124, Issue 4, 1105- 1110. Last updated April 2003.
4. National Organization for Rare Disorders (NORD). Rare Disease Database. Short Bowel Syndrome. Nightingale J, Woodward JM. Guidelines for management of patients with a short bowel. Gut. 2006 Aug; 55 (suppl 4): iv1-iv12.
5. Kocoshis SA, Beath SV, Booth IW, et al. Intestinal failure and small bowel transplantation, including clinical nutrition: Working Group report of the second World Congress of Pediatric Gastroenterology, Hepatology, and Nutrition. J Pediatr Gastroenterol Nutr 2004; 39 Suppl 2:S655.
6. Merritt, R., Cohran, V., Raphael, B., Sentongo, T., Volpert, D., Warner, B., & Goday, P. (2017). Intestinal Rehabilitation Programs in the Management of Pediatric Intestinal Failure and Short Bowel Syndrome. *Journal Of Pediatric Gastroenterology & Nutrition*, *65*(5), 588-596. doi: 10.1097/mpg.0000000000001722
7. Duro, D., Kamin, D., & Duggan, C. (2008). Overview of pediatric short bowel syndrome. Journal of Pediatric Gastroenterology & Nutrition, 47(Suppl 1). doi:10.1097/mpg.0b013e3181819007
8. Iyer, K., DiBaise, J. K., & Rubio-Tapia, A. (2022). AGA clinical practice update on management of Short bowel syndrome: Expert review. Clinical Gastroenterology and Hepatology, 20(10). doi:10.1016/j.cgh.2022.05.032

SUMMARY OF REVIEW/REVISIONS	DATE
REVISION- Notable revisions: Required Medical Information Continuation of Therapy Background Contraindications/Exclusions/Discontinuation References	Q1 2023
REVISION- Notable revisions: Required Medical Information Continuation of Therapy Duration of Approval Quantity Background References	Q2 2022
Q2 2022 Established tracking in new format	Historical changes on file