

Clinical Policy: Sodium-Glucose Co-Transporter 2 (SGLT2) Inhibitors

Reference Number: CP.CPA.347

Effective Date: 11.01.20

Last Review Date: 02.21

Line of Business: Commercial

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

The following agents contain a sodium-glucose co-transporter 2 (SGLT2) inhibitor and require prior authorization: canagliflozin (Invokana[®]), canagliflozin/metformin (Invokamet[®], Invokamet[®] XR), dapagliflozin/saxagliptin (Qtern[®]), dapagliflozin/saxagliptin/metformin (Qternmet[®] XR), empagliflozin/linagliptin (Glyxambi[®]), empagliflozin/linagliptin/metformin (Trijardy[™] XR), ertugliflozin/sitagliptin (Steglujan[™]), ertugliflozin (Steglatro[™]), and ertugliflozin/metformin (Segluromet[™]).

FDA Approved Indication(s)

SGLT2 inhibitors are indicated as adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus.

Dapagliflozin-, canagliflozin-, and empagliflozin-containing products are also indicated in adult patients with type 2 diabetes mellitus and established cardiovascular (CV) disease (or multiple CV risk factors [*dapagliflozin only*]) to:

- Reduce the risk of hospitalization for heart failure (HF) (dapagliflozin)
- Reduce the risk of major adverse CV events: CV death, nonfatal myocardial infarction, and nonfatal stroke (canagliflozin)
- Reduce the risk of CV death (empagliflozin)

Canagliflozin-containing products are additionally indicated to reduce the risk of end-stage kidney disease, doubling of serum creatinine, CV death, and hospitalization for HF in adults with type 2 diabetes mellitus and diabetic nephropathy with albuminuria > 300 mg/day.

Limitation(s) of use:

- SGLT2 inhibitors should not be used in patients with type 1 diabetes or for the treatment of diabetic ketoacidosis. SGLT2 inhibitors may increase the risk of diabetic ketoacidosis.
- Qternmet XR initiation is intended only for patients currently taking metformin.

Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation[®] that SGLT2 inhibitors are **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Type 2 Diabetes Mellitus (must meet all):

1. Diagnosis of type 2 diabetes mellitus;
2. Age \geq 18 years;
3. Member meets one of the following (a or b):
 - a. Failure of \geq 3 consecutive months of metformin, unless contraindicated or clinically significant adverse effects are experienced;
 - b. For medication-naïve members, requested agent is approvable if intended for concurrent use with metformin due to HbA1c \geq 8.5% (drawn within the past 3 months);
4. If request is for Qtern or Steglujan, failure of \geq 3 consecutive months of Glyxambi or Trijardy XR, unless clinically significant adverse effects are experienced or both are contraindicated;
5. If request is for Glyxambi, Qternmet XR, or Trijardy XR, failure of \geq 3 consecutive months of an empagliflozin-, dapagliflozin-, or sitagliptin-containing product, unless clinically significant adverse effects are experienced or all are contraindicated;
6. If request is for a canagliflozin- or ertugliflozin-containing product (i.e., Invokana, Invokamet, Invokamet XR, Segluromet, Steglatro), request meets one of the following (a or b):
 - a. Failure of \geq 3 consecutive months each of an empagliflozin- and dapagliflozin-containing product, unless clinically significant adverse effects are experienced or both are contraindicated;
 - b. Request is for a canagliflozin-containing product, and one of the following (i, ii, or iii):
 - i. Member has established CV disease (e.g., ASCVD or HF), and failure of \geq 3 consecutive months of an empagliflozin-containing product, unless contraindicated or clinically significant adverse effects are experienced;
 - ii. Member has multiple risk factors for CV disease (*see Appendix D*), and failure of \geq 3 consecutive months of a dapagliflozin-containing product, unless contraindicated or clinically significant adverse effects are experienced;
 - iii. Member has diabetic nephropathy, and failure of \geq 3 consecutive months each of an empagliflozin- and dapagliflozin-containing product, unless clinically significant adverse effects are experienced or both are contraindicated;
7. Dose does not exceed the FDA-approved maximum recommended dose (*see Section V*).

Approval duration: 12 months

B. Other diagnoses/indications

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial.

II. Continued Therapy

A. Type 2 Diabetes Mellitus (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;

2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed the FDA-approved maximum recommended dose (*see Section V*).

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2):

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.
Approval duration: Duration of request or 12 months (whichever is less); or
2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial.

III. Diagnoses/Indications for which coverage is NOT authorized:

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

AACE: American Association of Clinical Endocrinologists
 ACE: American College of Endocrinology
 ADA: American Diabetes Association
 ASCVD: atherosclerotic cardiovascular disease
 CV: cardiovascular
 DPP-4: dipeptidyl peptidase-4
 ER: extended-release

FDA: Food and Drug Administration
 GLP-1: glucagon-like peptide-1
 HbA1c: glycated hemoglobin
 HF: heart failure
 HFrEF: heart failure with reduced ejection fraction
 IR: immediate-release
 LVEF: left ventricular ejection fraction
 SGLT2: sodium-glucose co-transporter 2

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
metformin (Fortamet [®] , Glucophage [®] , Glucophage [®] XR, Glumetza [®])	Regular-release (Glucophage): 500 mg PO BID or 850 mg PO QD; increase as needed in increments of 500 mg/week or 850 mg every 2 weeks Extended-release: <ul style="list-style-type: none"> • Fortamet, Glumetza: 1,000 mg PO QD; increase as needed in increments of 500 mg/week 	Regular-release: 2,550 mg/day Extended-release: 2,000 mg/day

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
	<ul style="list-style-type: none"> Glucophage XR: 500 mg PO QD; increase as needed in increments of 500 mg/week 	
Segluromet (ertugliflozin/metformin)	Individualized dose PO BID	15/2,000 mg/day
Steglatro (ertugliflozin)	5 mg PO QD	15 mg/day
Jardiance (empagliflozin)	10 mg PO QD	25 mg/day
Synjardy (empagliflozin/metformin)	Individualized dose PO BID	25/2,000 mg/day
Synjardy XR (empagliflozin/metformin)	Individualized dose PO QD	25/2,000 mg/day
Glyxambi (empagliflozin/linagliptin)	One 10/5 mg tablet PO QD	25/5 mg/day
Trijardy XR (empagliflozin/linagliptin/metformin)	Individualized dose PO QD	25/5/2,000 mg/day
Januvia (sitagliptin)	100 mg PO QD	100 mg/day
Janumet (sitagliptin/metformin)	Individualized dose PO BID	100/2,000 mg/day
Janumet XR (sitagliptin/metformin)	Individualized dose PO QD	100/2,000 mg/day

Therapeutic alternatives are listed as Brand name[®] (generic) when the drug is available by brand name only and generic (Brand name[®]) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
 - History of serious hypersensitivity reaction to the requested drug product
 - Moderate to severe renal impairment*, end-stage renal disease, or dialysis
*Minimum degree of renal impairment varies per agent; refer to individual prescribing information
 - Metabolic acidosis, including diabetic ketoacidosis (*metformin-containing products only*)
- Boxed warning(s): lactic acidosis (*metformin-containing products only*)

Appendix D: General Information

- A double-blind, placebo-controlled dose-response trial by Garber et al. found the maximal efficacy of metformin to occur at doses of 2,000 mg. However, the difference in adjusted mean change in HbA1c between the 1,500 and 2,000 mg doses was 0.3%, suggesting that the improvement in glycemic control provided by the additional 500 mg may be insufficient when HbA1c is > 7%.
- Per the 2020 American Diabetes Association (ADA) and 2020 American Association of Clinical Endocrinologists and American College of Endocrinology (AAACE/ACE) guidelines:
 - Metformin is recommended for all patients with type 2 diabetes. Monotherapy is recommended for most patients; however:

- Starting with dual therapy (i.e., metformin plus another agent, such as a sulfonyleurea, thiazolidinedione, dipeptidyl peptidase-4 [DPP-4] inhibitor, SGLT2 inhibitor, glucagon-like peptide 1 [GLP-1] receptor agonist, or basal insulin) may be considered for patients with baseline HbA1c $\geq 1.5\%$ above their target per the ADA ($\geq 7.5\%$ per the AACE/ACE). According to the ADA, a reasonable HbA1c target for many non-pregnant adults is $< 7\%$ ($\leq 6.5\%$ per the AACE/ACE).
- Starting with combination therapy with insulin may be considered for patients with baseline HbA1c $> 10\%$ per the ADA ($> 9\%$ if symptoms are present per the AACE/ACE).
- If the target HbA1c is not achieved after approximately 3 months of monotherapy, dual therapy should be initiated. If dual therapy is inadequate after 3 months, triple therapy should be initiated. Finally, if triple therapy fails to bring a patient to goal, combination therapy with insulin should be initiated. Each non-insulin agent added to initial therapy can lower HbA1c by 0.7-1%.
- Although Invokana is currently the only SGLT2 inhibitor with a labeled indication for diabetic nephropathy, Farxiga and Jardiance have also demonstrated renal protective effects. The 2020 ADA guidelines recommend SGLT2 inhibitors be considered when treating type 2 diabetic patients with renal concerns, noting that Farxiga, Jardiance, and Invokana all confer renal benefit, with no preference for one over the other
 - Farxiga DECLARE-TIMI 58: The cardiorenal secondary composite outcome (sustained decline of at least 40% in eGFR to less than 60 mL/min/1.73 m², end stage renal disease (ESRD), or death from renal or CV causes) was significantly reduced with Farxiga compared to placebo (HR 0.76, 95% CI 0.67-0.87; $p < 0.0001$); excluding death from CV causes, the HR for the renal-specific outcome was 0.53 (95% CI 0.43-0.66; $p < 0.0001$). There was a 46% reduction in sustained decline in eGFR by at least 40% to less than 60 mL/min/1.73 m² (120 [1.4%] vs 221 [2.6%]; HR 0.54 [95% CI 0.43-0.67]; $p < 0.0001$). The risk of ESRD or renal death was also lower in the Farxiga group than in the placebo group (11 [0.1%] vs 27 [0.3%]; HR 0.41 [95% CI 0.20-0.82]; $p = 0.012$).
 - Jardiance EMPA-REG: Analysis of secondary outcomes yielded a reduction of risk for incident of or worsening nephropathy (HR 0.61 [95% CI 0.53-0.70]), progression to urine albumin to creatinine ratio (UACR) > 300 mg/g (HR 0.62 [95% CI 0.54-0.72]), composite consisting doubling of serum creatinine, initiation of renal replacement therapy, and death from ESRD (HR 0.54 [95% CI 0.40-0.75]).
- Examples of CV risk factors may include but are not limited to: dyslipidemia, hypertension, obesity/overweight, a family history of premature coronary disease, and smoking.
- According to the ADA, ASCVD includes coronary heart disease, cerebrovascular disease, or peripheral arterial disease presumed to be of atherosclerotic origin.
- Although Farxiga and Invokana are the only SGLT2 inhibitors with labeled indications for reducing the risk of HHF, Jardiance has also been shown to reduce the risk of HHF. The 2020 ADA guidelines acknowledge Farxiga along with Jardiance and Invokana as agents which reduce the risk of HHF, without a preference for one agent over the other. Any of the three can be used in T2DM patients with established HF; however, the guidelines recommend only Jardiance or Invokana for patients with established ASCVD.

- Jardiance EMPA-REG Outcome, patients with established ASCVD: The primary outcome (composite of death from CV causes, nonfatal MI, or non-fatal stroke) was reduced with Jardiance compared to placebo (HR 0.86, 95% CI 0.74 – 0.99; p = 0.04). Analysis of secondary outcomes yielded a reduction in hospitalization for heart failure when treated with Jardiance compared to placebo (HR 0.65, 95% CI 0.50 – 0.85; p = 0.002).
- Invokana CANVAS Program, patients with established ASCVD or multiple ASCVD risk factors: The primary outcome (composite of death from CV causes, nonfatal MI or nonfatal stroke) was reduced with Invokana compared to placebo (HR 0.86, 95% CI 0.75 – 0.97; p = 0.02). Analysis of secondary outcomes yielded a reduction in hospitalization for heart failure when treated with Invokana compared to placebo (HR 0.67, 95% CI 0.52 – 0.87).
- In August 2020, the FDA removed the boxed warning regarding the risk of leg and foot amputations from the canagliflozin prescribing information. Although the risk is still present (and continues to be described in the Warnings and Precautions section of the prescribing information), the FDA notes the significantly enhanced benefit of canagliflozin (e.g., effects in heart and kidney disease) relative to said risk, which safety information from recent trials suggest is lower than previously described.

V. Dosage and Administration

Drug Name	Dosing Regimen	Maximum Dose
Glyxambi (empagliflozin/linagliptin)	One 10/5 mg tablet PO QD	25/5 mg/day
Invokamet (canagliflozin/metformin)	One 50/500 mg tablet PO BID	300/2,000 mg/day
Invokamet XR (canagliflozin/metformin)	Two 50/500 mg tablets PO QD	300/2,000 mg/day
Invokana (canagliflozin)	100 mg PO QD	300 mg/day
Qtern (dapagliflozin/saxagliptin)	One 5/5 mg tablet PO QD	10/5 mg/day
Qternmet XR (dapagliflozin/saxagliptin/metformin)	Individualized dose PO QD	10/5/2,000 mg/day
Segluromet (ertugliflozin/metformin)	Individualized dose PO BID	15 mg/2,000 mg/day
Steglatro (ertugliflozin)	5 mg PO QD.	15 mg/day
Steglujan (ertugliflozin/sitagliptin)	One 5/100 mg tablet PO QD	15/100 mg/day
Trijardy XR (empagliflozin/linagliptin/metformin)	Individualized dose PO QD	25/5/2,000 mg/day

VI. Product Availability

Drug Name	Availability
Glyxambi (empagliflozin/linagliptin)	Tablets: 10/5 mg, 25/5 mg
Invokamet (canagliflozin/metformin)	Tablets: 50/500 mg, 50/1,000 mg, 150/500 mg, 150/1,000 mg
Invokamet XR (canagliflozin/metformin)	Tablets: 50/500 mg, 50/1,000 mg, 150/500 mg, 150/1,000 mg

Drug Name	Availability
Invokana (canagliflozin)	Tablets: 100 mg, 300 mg
Qtern (dapagliflozin/saxagliptin)	Tablet: 5/5 mg, 10/5 mg
Qternmet XR (dapagliflozin/saxagliptin/metformin)	Tablets: 2.5/2.5/1,000 mg, 5/2.5/1,000 mg, 5/5/1000 mg, 10/5/1,000 mg
Segluromet (ertugliflozin/metformin)	Tablets: 2.5/500 mg, 2.5/1000 mg, 7.5/500 mg, 7.5/1,000 mg
Steglatro (ertugliflozin)	Tablets: 5 mg, 15 mg
Steglujan (ertugliflozin/sitagliptin)	Tablets: 5/100 mg, 15/100 mg
Trijardy XR (empagliflozin/linagliptin/ metformin)	Tablets: 5/2.5/1,000 mg, 10/5/1,000 mg, 12.5/2.5/1,000 mg, 25/5/1,000 mg

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Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created per September SDC and prior clinical guidance.	09.21.20	11.20
Per December SDC and prior clinical guidance, for Qtern and Steglujan added specific redirection to Glyxambi or Trijardy XR; removed Glyxambi and Trijardy XR from policy as prior authorization is not required.	12.15.20	
1Q 2021 annual review: no significant changes; removed lower limb amputation boxed warning for canagliflozin from Appendix C per updated PI; references reviewed and updated.	10.28.20	02.21
Removed heart failure therapies from Appendix B as Farxiga and Jardiance do not require PA for Commercial.	09.08.21	

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

CLINICAL POLICY
Sodium-Glucose Co-Transporter 2 (SGLT2) Inhibitors



The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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