ILLUCCIX- kit for the preparation of gallium ga 68 gozetotide injection
Telix Pharmaceuticals (US) Inc.

HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use ILLUCCIX safely and effectively. See full prescribing information for ILLUCCIX.

ILLUCCIX® (kit for the preparation of gallium Ga 68 gozetotide injection), for intravenous use

Initial U.S. Approval: 2020

INDICATIONS AND USAGE

ILLUCCIX, after radiolabeling with Ga 68, is a radioactive diagnostic agent indicated for positron emission tomography (PET) of prostate-specific membrane antigen (PSMA) positive lesions in men with prostate cancer:

- With suspected metastasis who are candidates for initial definitive therapy
- With suspected recurrence based on elevated serum prostate-specific antigen (PSA) level
- For selection of patients with metastatic prostate cancer, for whom lutetium Lu 177 vipivotide tetraxetan PSMA-directed therapy is indicated (1)

DOSAGE AND ADMINISTRATION

- Use appropriate aseptic technique and radiation safety handling measures in the manipulation and administration of Gallium Ga 68 Gozetotide Injection. (2.1)
- The recommended amount of radioactivity for adults is 111 MBq to 259 MBq (3 mCi to 7 mCi) as a bolus intravenous injection. (2.2)
- A diuretic expected to act within the uptake time period may be administered at the time of radiotracer injection. (2.2)
- Initiate imaging 50 minutes to 100 minutes after administration. The patient should void immediately prior to initiation of imaging. The scan should begin caudally and proceed cranially. (2.6)
- See full prescribing information for additional preparation, administration, imaging, and radiation dosimetry information. (2)

DOSAGE FORMS AND STRENGTHS

ILLUCCIX is supplied as a kit containing: (3)

- Vial 1 (Gozetotide Vial) contains 25 mcg gozetotide and 10 mcg D-mannose (stabilizer) as a lyophilized powder
- Vial 2 (Acetate Buffer Vial) contains acetate buffer, either:
  - Vial 2A in Configuration A for use with cyclotron produced Ga 68 via GE FASTlab ™or EZAG generator
  - Vial 2B in Configuration B for use with IRE generator
- Vial 3 (Sterile Vacuumed Reaction Vial) for the collection of gallium Ga 68 chloride and radiolabeling reaction.

After radiolabeling and pH adjustment with acetate buffer and radiolabeling with Ga 68, Vial 3 is a multiple-dose vial containing up to 1,850 MBq (50 mCi) of Gallium Ga 68 Gozetotide Injection in 7.5 mL at a strength of up to 247 MBq (6.7 mCi) per mL. (3)

CONTRAINDICATIONS

None (4)

WARNINGS AND PRECAUTIONS

- Risk for Misinterpretation: Gallium Ga 68 gozetotide uptake can be seen in a variety of tumor types and

in non-malignant processes. Interpretation of ILLUCCIX PET imaging with histopathology and/or other diagnostic procedures is recommended. (5.1)
- Radiation Risks: Ensure safe handling to protect patients and health care providers from unintentional radiation exposure. (2.1, 5.2)

ADVERSE REACTIONS

The most commonly reported adverse reactions (incidence ≥ 0.5%) include fatigue, nausea, constipation, and vomiting. (6)

To report SUSPECTED ADVERSE REACTIONS, contact Telix Pharmaceuticals (US) Inc. at 1-844-455-8638 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

See 17 for PATIENT COUNSELING INFORMATION

Revised: 9/2024

FULL PRESCRIBING INFORMATION: CONTENTS*

1 INDICATIONS AND USAGE
2 DOSAGE AND ADMINISTRATION
2.1 Radiation Safety - Drug Handling
2.2 Recommended Dosage and Administration Instructions
2.3 Patient Preparation Prior to PET Imaging
2.4 Drug Preparation
2.5 Specifications and Quality Control
2.6 Image Acquisition
2.7 Image Interpretation
2.8 Radiation Dosimetry
3 DOSAGE FORMS AND STRENGTHS
4 CONTRAINDICATIONS
5 WARNINGS AND PRECAUTIONS
5.1 Risk for Misinterpretation
5.2 Radiation Risks
6 ADVERSE REACTIONS
7 DRUG INTERACTIONS
8 USE IN SPECIFIC POPULATIONS
8.1 Pregnancy
8.2 Lactation
8.4 Pediatric Use
8.5 Geriatric Use
10 OVERDOSAGE
11 DESCRIPTION
11.1 Chemical Characteristics
11.2 Physical Characteristics
11.3 External Radiation
12 CLINICAL PHARMACOLOGY
12.1 Mechanism of Action
12.2 Pharmacodynamics
12.3 Pharmacokinetics
13 NONCLINICAL TOXICOLOGY
13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility
14 CLINICAL STUDIES

14.1 Imaging Prior to Initial Definitive Therapy
14.2 Imaging Prior to Suspected Recurrence Therapy
14.3 Imaging to Select Patients for Lutetium Lu 177 Vipivotide Tetraxetan Therapy
16 HOW SUPPLIED/STORAGE AND HANDLING
* Sections or subsections omitted from the full prescribing information are not listed.

FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

ILLUCCIX, after radiolabeling with Ga 68, is indicated for positron emission tomography (PET) of prostate-specific membrane antigen (PSMA) positive lesions in men with prostate cancer:

- With suspected metastasis who are candidates for initial definitive therapy.
- With suspected recurrence based on elevated serum prostate-specific antigen (PSA) level.
- For selection of patients with metastatic prostate cancer, for whom lutetium Lu 177 vipivotide tetraxetan PSMA-directed therapy is indicated.

2 DOSAGE AND ADMINISTRATION

2.1 Radiation Safety - Drug Handling

After reconstitution and radiolabeling of ILLUCCIX, the vial contains Gallium Ga 68 Gozetotide Injection. Handle Gallium Ga 68 Gozetotide Injection with appropriate safety measures to minimize radiation exposure [*see Warnings and Precautions (*5.2*)*]. Use waterproof gloves, effective radiation shielding, and other appropriate safety measures when preparing and handling Gallium Ga 68 Gozetotide Injection.

Radiopharmaceuticals should be used by or under the control of physicians who are qualified by specific training and experience in the safe use and handling of radionuclides, and whose experience and training have been approved by the appropriate governmental agency authorized to license the use of radionuclides.

2.2 Recommended Dosage and Administration Instructions

Recommended Dosage

In adults, the recommended amount of radioactivity to be administered for PET is 111 MBq to 259 MBq (3 mCi to 7 mCi) administered as an intravenous bolus injection.

Administration

- Use aseptic technique and radiation shielding when withdrawing and administering Gallium Ga 68 Gozetotide Injection.
- Calculate the necessary volume to administer based on calibration time and required dose.
- Inspect Gallium Ga 68 Gozetotide Injection visually for particulate matter and

discoloration before administration. Only use solutions that are clear, colorless or at most slightly yellow, and without visible particles.
- Gallium Ga 68 Gozetotide Injection may be diluted with sterile 0.9% Sodium Chloride Injection, USP.
- Assay the final dose in a dose calibrator immediately before administration to the patient.
- After injection of Gallium Ga 68 Gozetotide Injection, administer an intravenous flush of sterile 0.9% Sodium Chloride Injection, USP to ensure full delivery of the dose.
- Dispose of any unused drug in a safe manner in compliance with applicable regulations.
- Unless contraindicated, a diuretic expected to act within the uptake time period may be administered at the time of radiotracer injection to potentially decrease artifact from radiotracer accumulation in the urinary bladder and ureters.

2.3 Patient Preparation Prior to PET Imaging

Instruct patients to drink a sufficient amount of water to ensure adequate hydration prior to administration of Gallium Ga 68 Gozetotide Injection and to continue to drink and void frequently following administration to reduce radiation exposure, particularly during the first hour after administration *[see Warnings and Precautions (*5.2*)]*.

2.4 Drug Preparation

ILLUCCIX is supplied as a 3-vial kit in two different configurations *[*see *Dosage Forms and Strengths (3)]* for preparation of Gallium Ga 68 Gozetotide Injection with eluate from one of the following (see below for specific instructions for use with each Ga 68 source):
- Cyclotron produced via GE FASTlab ™(Configuration A)
- Eckert & Ziegler (EZAG) GalliaPharm ®Germanium 68/Gallium 68 (Ge 68/Ga 68) generator (Configuration A)
- IRE Galli Eo ®Ge 68/Ga 68 generator (Configuration B)

The Ge 68/Ga 68 generators and cyclotron are not supplied with ILLUCCIX.

Components of ILLUCCIX include:
- Vial 1 (Gozetotide Vial) contains 25 mcg of gozetotide and 10 mcg of D-mannose (stabilizer) as a lyophilized powder.
- Vial 2 (Acetate Buffer Vial) contains 150 mg anhydrous sodium acetate in HCl buffer.
- Vial 3 (Sterile Vacuumed Reaction Vial) is a sterile, evacuated vial that serves as the collection vial for Ga 68 chloride and radiolabeling reaction.

Prepare Gallium Ga 68 Gozetotide Injection for intravenous injection according to the following aseptic procedure:
a. Use suitable shielding to reduce radiation exposure.
b. Wear waterproof gloves.
c. If Ga 68 is generator produced, test the Ga 68 chloride eluate for Ge 68 breakthrough weekly by a suitable method according to manufacturer recommendations. Ge 68 breakthrough and other gamma emitting radionuclides should meet the specifications (≤0.001%) provided by the manufacturer. If Ga 68 is cyclotron produced, test for Ga 66 and Ga 67 (with specification of ≤2% combined total) when a new lot of Zn 68 is introduced for manufacturing.

d. Place a "radioactive" label on Vial 3 (Sterile Vacuumed Reaction Vial) with product name, lot number, and date.
e. Remove the vial cap from Vial 1, Vial 2, and Vial 3.
f. Swab the top of each vial with alcohol to disinfect the surface and allow the top of each vial to dry.
g. Note that to minimize any potential metallic contamination, the shortest possible needle should be used for the transfer of the gallium solution from the generator. The needle should be clean and dilute acid resistant.
h. Use only plastic syringes for preparation and administration. **Do not**use syringes with rubber plungers.
i. Note that prior to use of any vial, confirm the correct vial is being used by a visual check of the vial label.
j. Follow the specific reconstitution procedure below, dependent on Ga 68 source. Then continue with the dilution and radiosynthesis procedure below.

Preparation with Cyclotron Produced Ga 68 via GE FASTlab

Collection of Gallium Ga 68 Chloride

1. After purification by the FASTlab, the Ga 68 chloride solution is passed through a sterile filter and into the cassette product vial automatically by the FASTlab.
2. Pierce Vial 3 (Sterile Vacuumed Reaction Vial) with a sterile needle connected to a 0.2 micron sterile vented filter (not supplied) to maintain atmospheric pressure within the vial during the reconstitution process.
3. Aseptically transfer 5 mL of Ga 68 chloride solution into Vial 3.

Reconstitution and Radiolabeling Reaction Procedure

1. Insert a sterile 10 mL syringe with a needle into Vial 2 (Acetate Buffer Vial Configuration A) and draw up the contents of the vial (target 2.5 mL).
2. Inject the contents of the 10 mL syringe into Vial 1 (Gozetotide Vial).
3. Gently swirl Vial 1 to ensure the product is thoroughly dissolved.
4. Insert a sterile 10 mL syringe with a needle into Vial 1 containing the dissolved gozetotide and draw up the entire contents of the vial.
5. Transfer the contents of the 10 mL syringe to Vial 3 (Sterile Vacuumed Reaction Vial) containing the Ga 68 chloride.
6. Wait for 5 minutes for radiolabeling to take place at ambient temperature (25°C (77°F); excursions permitted to 15°C to 30°C (59°F to 86°F)).
7. Assay the whole vial containing the Gallium Ga 68 Gozetotide Injection for total radioactivity using a dose calibrator, calculate the radioactivity concentration and record the result.
8. Perform the quality control of Gallium Ga 68 Gozetotide Injection according to the recommended methods in the Subsection 2.5Specifications and Quality Control.
9. Prior to use, visually inspect the solution behind a shielded screen for radioprotection purposes. Only use solutions that are clear without visible particles.
10. Keep the vial containing the Gallium Ga 68 Gozetotide Injection upright in a radio-protective shield container at ambient temperature until use.
11. After reconstitution and addition of Ga 68 chloride to the kit components in the reaction Vial 3, use Gallium Ga 68 Gozetotide Injection within 4 hours. The final volume of the Gallium Ga 68 Gozetotide Injection is 7.5 mL.

Preparation with Eckert & Ziegler GalliaPharm Generator

Collection of Gallium Ga 68 Chloride

1. Prepare a syringe containing 5 mL of sterile ultrapure 0.1 M HCl provided with the GalliaPharm Generator for elution.
2. Pierce Vial 3 (Sterile Vacuumed Reaction Vial) with a sterile needle connected to a 0.2 micron sterile vented filter (not supplied) to maintain atmospheric pressure within the vial during the reconstitution process.
3. Connect the male luer of the outlet line of the GalliaPharm generator to a sterile needle.
4. Connect Vial 3 directly to the outlet line of the GalliaPharm generator by pushing the needle through the rubber septum and place the vial in a radiation shielded container.
5. Elute the generator directly with the 5 mL 0.1 M HCl from step 1 into Vial 3 according to the instructions for use of the GalliaPharm generator that are supplied by Eckert & Ziegler. Perform the elution manually or by means of a pump. Collect 5 mL of eluate.
6. At the end of the elution, disconnect the generator from Vial 3 by removing the needle from the rubber septum.

Reconstitution and Radiolabeling Reaction Procedure

1. Insert a sterile 10 mL syringe with a needle into Vial 2 (Acetate Buffer Vial Configuration A) and draw up the contents of the vial (target 2.5 mL).
2. Inject the contents of the 10 mL syringe into Vial 1 (Gozetotide Vial).
3. Gently swirl Vial 1 to ensure the product is thoroughly dissolved.
4. Insert a sterile 10 mL syringe with a needle into Vial 1 containing the dissolved gozetotide and draw up the entire contents of the vial.
5. Transfer the contents of the 10 mL syringe to Vial 3 (Sterile Vacuumed Reaction Vial) containing the Ga 68 chloride.
6. Wait for 5 minutes for radiolabeling to take place at ambient temperature (25°C (77°F); excursions permitted to 15°C to 30°C (59°F to 86°F)).
7. Assay the whole vial containing the Gallium Ga 68 Gozetotide Injection for total radioactivity using a dose calibrator, calculate the radioactivity concentration and record the result.
8. Perform the quality control of Gallium Ga 68 Gozetotide Injection according to the recommended methods in the Subsection 2.5Specifications and Quality Control.
9. Prior to use, visually inspect the solution behind a shielded screen for radioprotection purposes. Only use solutions that are clear without visible particles.
10. Keep the vial containing the Gallium Ga 68 Gozetotide Injection upright in a radio-protective shield container at ambient temperature until use.
11. After reconstitution and addition of Ga 68 chloride to the kit components in the reaction Vial 3, use Gallium Ga 68 Gozetotide Injection within 4 hours. The final volume of the Gallium Ga 68 Gozetotide Injection is 7.5 mL.

<u>Preparation with IRE Galli Eo Generator</u>

Collection of Gallium Ga 68 Chloride

1. Connect the male luer of the outlet line of the Galli Eo generator to a sterile needle.
2. Elute the generator directly into Vial 3 (Sterile Vacuumed Reaction Vial) according to the instructions for use of the Galli Eo generator that are supplied by IRE. Collect 1.1 mL of eluate.
3. At the end of the elution, disconnect the generator from Vial 3 by removing the needle from the rubber septum.

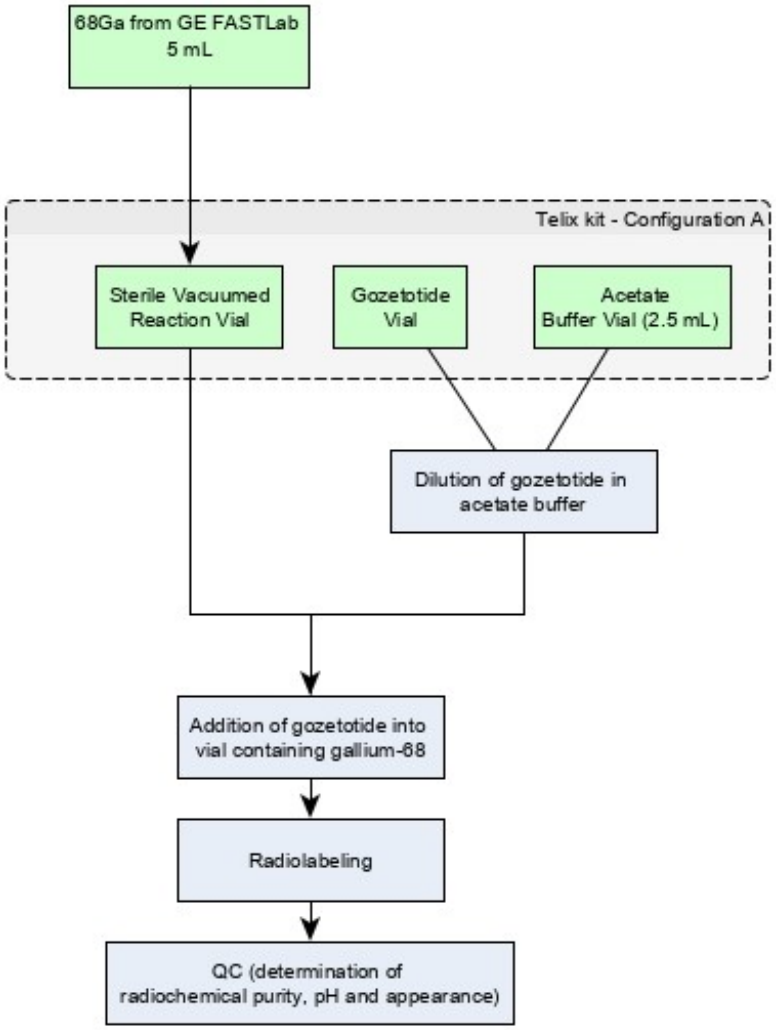
Reconstitution and Radiolabeling Reaction Procedure

1. Insert a sterile 10 mL syringe with a needle into Vial 2 (Acetate Buffer Vial Configuration B) and draw up the contents of the vial (target 6.4 mL).
2. Inject the contents of the 10 mL syringe into Vial 1 (Gozetotide Vial).
3. Gently swirl Vial 1 to ensure the product is thoroughly dissolved.
4. Insert a sterile 10 mL syringe with a needle into Vial 1 containing the dissolved gozetotide and draw up the entire contents of the vial.
5. Transfer the contents of the 10 mL syringe to Vial 3 (Sterile Vacuumed Reaction Vial) containing the Ga 68 chloride.
6. Wait for 5 minutes for radiolabeling to take place at ambient temperature (25°C (77°F); excursions permitted to 15°C to 30°C (59°F to 86°F)).
7. Assay the whole vial containing the Gallium Ga 68 Gozetotide Injection for total radioactivity using a dose calibrator, calculate the radioactivity concentration and record the result.
8. Perform the quality control of Gallium Ga 68 Gozetotide Injection according to the recommended methods in the Subsection 2.5Specifications and Quality Control.
9. Prior to use, visually inspect the solution behind a shielded screen for radioprotection purposes. Only use solutions that are clear without visible particles.
10. Keep the vial containing the Gallium Ga 68 Gozetotide Injection upright in a radio-protective shield container at ambient temperature until use.
11. After reconstitution and addition of Ga 68 chloride to the kit components in the reaction Vial 3, use Gallium Ga 68 Gozetotide Injection within 4 hours. The final volume of the Gallium Ga 68 Gozetotide Injection is 7.5 mL.

Flow diagrams are provided for the radiosynthetic process to be followed at the radiopharmacy site for:

- ILLUCCIX Configuration "A" when using Ga 68 prepared by cyclotron (Figure 1) or
- ILLUCCIX Configurations "A" or "B" when using an indicated GMP-grade EZAG GalliaPharm Ge 68/Ga 68 Generator (Figure 2) or IRE Galli Eo Ge 68/Ga 68 Generator (Figure 3).

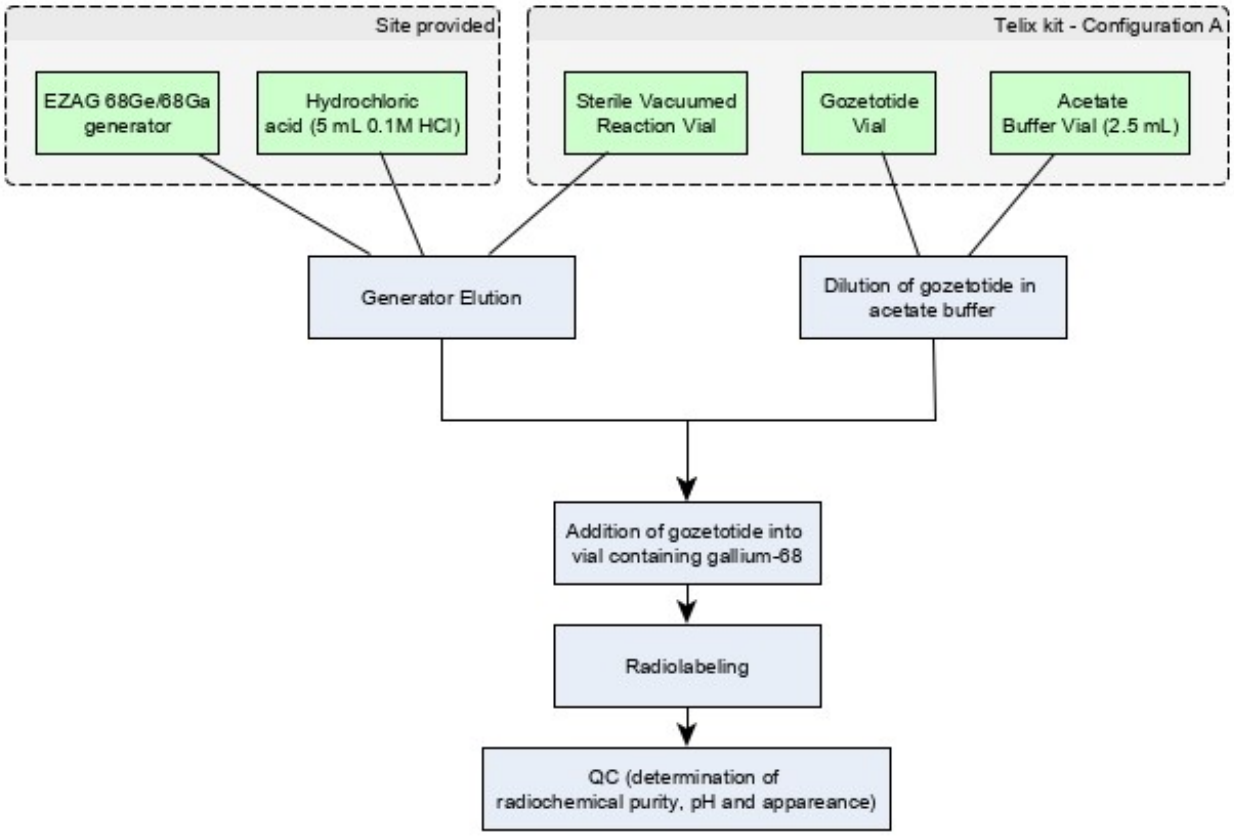
Figure 1: Preparation with Cyclotron Produced Ga 68 via GE FASTlab



Note: Ga 68 from GE FASTlab is aseptically transferred into the Sterile Vacuumed Reaction Vial.

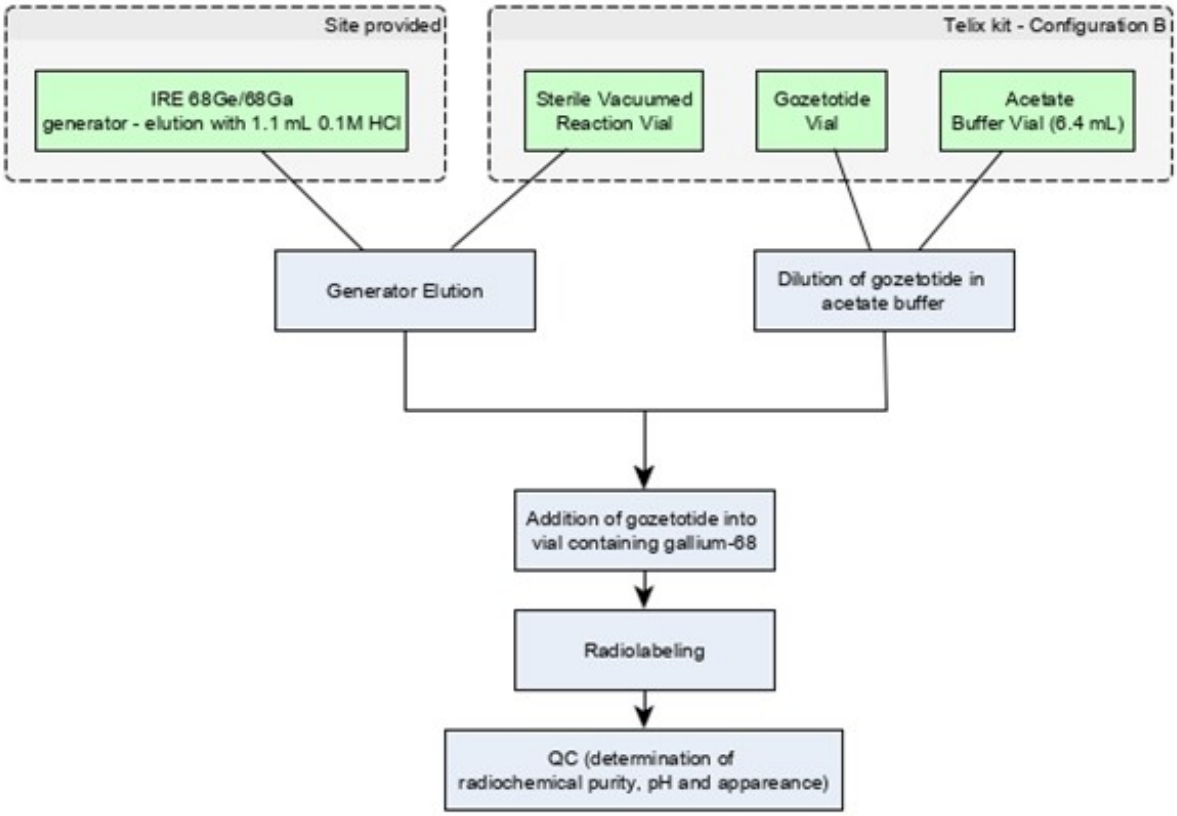
Use "Configuration A" with cyclotron produced Ga 68 via GE FASTlab *[see How Supplied/Storage and Handling (16)]*.

Figure 2: Preparation with Eckert & Ziegler GalliaPharm Generator



Note: Use "Configuration A" with EZAG GalliaPharm Ge 68/Ga 68 generator *[see How Supplied/Storage and Handling (16)]*.

Figure 3: Preparation with IRE Galli Eo Generator



Note: Use "Configuration B" with IRE Galli Eo Ge 68/Ga 68 generator *[*see *How Supplied/Storage and Handling (*16*)]*.

2.5 Specifications and Quality Control

Perform the quality controls in Table 1behind a lead glass shield for radioprotection purposes.

Table 1: Specifications for the Radiolabeled Imaging Product (Gallium Ga 68 Gozetotide Injection)

Test	**Analytical method**	**Acceptance criteria**
Appearance	Visual examination	Colorless to slightly yellow solution Free from visible particles
pH	pH-meter or pH-strips	4.0 to 5.0
Radiochemical purity • Content of gallium Ga 68 gozetotide • Content of free and colloidal Ga 68	Instant thin-layer chromatography, silica gel (iTLC SG); See methods below	≥95% ≤5%

Perform one of the following:

Cutting Technique

1. Pour ammonium acetate 1 M/methanol (1/1 V/V) solution to a depth of 3 mm to 4 mm in the developing chamber, cover the chamber and allow it to equilibrate.
2. Draw a pencil line at 1 cm from the bottom of the iTLC strip, and a dotted line 5 cm from the pencil line. Apply a drop of gallium Ga 68 gozetotide at the center of the pencil line.
3. Place the iTLC strip in the developing chamber and allow it to develop for a distance of 10 cm from the point of application.

i. Cut the iTLC strip following the dotted line and measure each piece with the radioactivity dose calibrator.
ii. Calculate the quantity (in percent) of gallium Ga 68 gozetotide in the solution using the formula:

% Gallium Ga 68 gozetotide=(Activity top piece)/(Activity bottom piece+Activity top piece) ×100

Scanning Technique

1. Pour ammonium acetate 1 M/methanol (1/1 V/V) solution to a depth of 3 mm to 4 mm in the developing chamber, cover the chamber and allow it to equilibrate.
2. Draw a pencil line at 1 cm from the bottom of the iTLC strip and apply a drop of gallium Ga 68 gozetotide at the center of the pencil line.
3. Place the iTLC strip in the developing chamber and allow it to develop for a distance of 10 cm from the point of application.
4. Scan the iTLC with a radiometric iTLC scanner.

i. Calculate the quantity (in percent) of gallium Ga 68 gozetotide in the solution by integration of the peaks on the chromatogram.
ii. The retention factor (Rf) specifications are:

Free and colloidal Ga 68 species, Rf = 0 to 0.1,

Gallium Ga 68 gozetotide, Rf = 0.6 to 1.

2.6 Image Acquisition

Position the patient supine with arms above the head. Begin PET scanning 50 minutes to 100 minutes after the intravenous administration of Gallium Ga 68 Gozetotide Injection. Patients should void immediately prior to image acquisition and image acquisition should begin at the proximal thighs and proceed cranially to the skull base or skull vertex. Adapt imaging technique according to the equipment used and patient characteristics in order to obtain the best image quality possible.

2.7 Image Interpretation

Gallium Ga 68 gozetotide binds to PSMA. Based on the intensity of the signals, PET images obtained using gallium Ga 68 gozetotide indicate the presence of PSMA in tissues.

Imaging Prior to Initial Definitive or Suspected Recurrence Therapy

Lesions should be considered suspicious if uptake is greater than physiologic uptake in that tissue or greater than adjacent background if no physiologic uptake is expected.

Tumors that do not express PSMA will not be visualized. Increased uptake in tumors is not specific for prostate cancer [*see Warnings and Precautions (5.1)*].

Imaging to Select Patients for Lutetium Lu 177 Vipivotide Tetraxetan Therapy

For patient selection, interpret ILLUCCIX PET in conjunction with patients' clinical history and imaging from other modalities, including diagnostic anatomical imaging in clinically relevant regions, such as chest, abdomen, and pelvis. On ILLUCCIX PET images, compare uptake of gallium Ga 68 gozetotide at sites of suspected prostate cancer (lesions) with uptake in normal liver. Lesions should be considered positive if gallium Ga 68 gozetotide uptake is greater than normal liver and negative if gallium Ga 68 gozetotide uptake is less than or equal to normal liver.

Patients should be considered eligible for lutetium Lu 177 vipivotide tetraxetan therapy if at least one tumor lesion is positive and all lesions on anatomical imaging larger in short axis than size criteria are also positive [size criteria: organs ≥ 1 cm, lymph nodes ≥ 2.5 cm, bones (soft tissue component) ≥ 1 cm]. Patients should be considered ineligible for lutetium Lu 177 vipivotide tetraxetan therapy if all lesions are negative or any one lesion larger than size criteria is negative.

The interpretation of ILLUCCIX PET may differ depending on imaging readers [*see Warnings and Precautions (5.1)*].

For therapeutic information, refer to the prescribing information of lutetium Lu 177 vipivotide tetraxetan.

2.8 Radiation Dosimetry

Estimated radiation absorbed doses per injected activity for organs and tissues of adult male patients following an intravenous bolus of Gallium Ga 68 Gozetotide Injection are shown in Table 2.

The effective radiation dose resulting from the administration of 259 MBq (7 mCi) is about 4.4 mSv. The radiation doses for this administered dose to the critical organs, which are the kidneys, urinary bladder, and spleen, are 96.2 mGy, 25.4 mGy, and 16.8 mGy, respectively.

These radiation doses are for Gallium Ga 68 Gozetotide Injection alone. If CT or a transmission source are used for attenuation correction, the radiation dose will increase by an amount that varies by technique.

Table 2: Estimated Radiation Absorbed Dose per Injected Activity in Selected Organs and Tissues of Adults after Intravenous Administration of Gallium Ga 68 Gozetotide Injection

Organ	**Absorbed dose (mGy/MBq)**	
	Mean	**SD**
Adrenals	0.0156	0.0014
Brain	0.0104	0.0011
Breasts	0.0103	0.0011
Gallbladder	0.0157	0.0012
Lower Colon	0.0134	0.0009
Small Intestine	0.014	0.002

Stomach	0.0129	0.0008
Heart	0.012	0.0009
Kidneys	0.3714	0.0922
Liver	0.0409	0.0076
Lungs	0.0111	0.0007
Muscle	0.0103	0.0003
Pancreas	0.0147	0.0009
Red Marrow	0.0114	0.0016
Skin	0.0091	0.0003
Spleen	0.065	0.018
Testes	0.0111	0.0006
Thymus	0.0105	0.0006
Thyroid	0.0104	0.0006
Urinary Bladder	0.0982	0.0286
Total Body	0.0143	0.0013
Effective Dose (mSv/MBq)	**0.0169**	**0.0015**

3 DOSAGE FORMS AND STRENGTHS

ILLUCCIX is supplied as a kit for the preparation of Gallium Ga 68 Gozetotide Injection. Each kit contains:

- Vial 1 (Gozetotide Vial): 25 mcg of gozetotide and 10 mcg of D-mannose (stabilizer) as a lyophilized powder.
- Vial 2 (Acetate Buffer Vial): 150 mg anhydrous sodium acetate in HCl buffer, provided as either vial 2A or vial 2B, depending on Ga 68 source used.
- Vial 3 (Sterile Vacuumed Reaction Vial): a sterile, evacuated vial that serves as the collection vial for Ga 68 chloride and radiolabeling reaction.

Ga 68 is obtained from one of the following sources:
- Cyclotron via GE FASTlab.
- Eckert & Ziegler GalliaPharm Ge 68/Ga 68 generator
- IRE Galli Eo Ge 68/Ga 68 generator.

After reconstitution and pH adjustment with acetate buffer and radiolabeling with Ga 68, Vial 3 is a multiple-dose vial containing up to 1,850 MBq (50 mCi) of Gallium Ga 68 Gozetotide Injection in 7.5 mL at a strength of up to 247 MBq (6.7 mCi) per mL.

4 CONTRAINDICATIONS

None

5 WARNINGS AND PRECAUTIONS

5.1 Risk for Misinterpretation

Image interpretation errors can occur with ILLUCCIX PET. A negative image does not rule out the presence of prostate cancer and a positive image does not confirm the

presence of prostate cancer. Gallium Ga 68 gozetotide uptake is not specific for prostate cancer and may occur with other types of cancer as well as non-malignant processes such as Paget's disease, fibrous dysplasia, and osteophytosis. Clinical correlation, which may include histopathological evaluation of the suspected prostate cancer site, is recommended.

Imaging Prior to Initial Definitive or Suspected Recurrence Therapy

The performance of ILLUCCIX for imaging of biochemically recurrent prostate cancer seems to be affected by serum PSA levels and by site of disease *[see Clinical Studies (14)]*. The performance of ILLUCCIX for imaging of metastatic pelvic lymph nodes prior to initial definitive therapy seems to be affected by Gleason score *[see Clinical Studies (14)]*.

Imaging to Select Patients for Lutetium Lu 177 Vipivotide Tetraxetan Therapy

The interpretation of ILLUCCIX PET may differ depending on imaging readers [*see Dosage and Administration (2.7)*]. ILLUCCIX PET interpretations to select patients for lutetium Lu 177 vipivotide tetraxetan therapy may be more consistent when judging gallium Ga 68 gozetotide uptake in any one tumor lesion compared to judging uptake for all lesions larger than size criteria *[see Clinical Studies (14.3)*]. Multidisciplinary consultation to select patients for lutetium Lu 177 vipivotide tetraxetan therapy is recommended, particularly for ILLUCCIX imaging that a single reader finds borderline or difficult to interpret, or when patient eligibility hinges only on judgment of gallium Ga 68 gozetotide uptake for all lesions larger than size criteria.

5.2 Radiation Risks

Gallium Ga 68 gozetotide contributes to a patient's overall long-term cumulative radiation exposure. Long-term cumulative radiation exposure is associated with an increased risk for cancer. Ensure safe handling to minimize radiation exposure to the patient and health care providers. Advise patients to hydrate before and after administration and to void frequently after administration *[see Dosage and Administration (*2.1,2.3*)]*.

6 ADVERSE REACTIONS

Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The safety of ILLUCCIX has been established based on three prospective studies of another formulation of gallium Ga 68 gozetotide in patients with prostate cancer [*see Clinical Studies (14)*]. Below is a display of the adverse reactions in these studies.

The safety of gallium Ga 68 gozetotide was evaluated in 960 patients in the PSMA-PreRP and PSMA-BCR studies, each receiving one dose of gallium Ga 68 gozetotide. The average injected activity was 188.7 ± 40.7 MBq (5.1 ± 1.1 mCi) [*see Clinical Studies (14.1, 14.2)*]. The most commonly reported adverse reactions were nausea, diarrhea, and dizziness, occurring at a rate of <1%.

In the VISION study, one thousand and three (1,003) patients received one dose of gallium Ga 68 gozetotide intravenously with the amount of radioactivity 167.1 ± 23.1

MBq (4.52 ± 0.62 mCi) [*see Clinical Studies (14.3)*]. Adverse reactions occurring at ≥ 0.5% in patients with metastatic prostate cancer who received gallium Ga 68 gozetotide injection are presented in Table 3.

Table 3: Adverse Reactions (≥ 0.5%) in Patients with Metastatic Prostate Cancer Who Received Gallium Ga 68 Gozetotide Injection in the VISION study

Adverse Reaction	**Gallium Ga 68 Gozetotide Injection N = 1,003 n (%)**
General disorders	
Fatigue	12 (1.2)
Gastrointestinal disorders	
Nausea	8 (0.8)
Constipation	5 (0.5)
Vomiting	5 (0.5)

Adverse reactions occurring at a rate of < 0.5% in the VISION study were diarrhea, dry mouth, injection site reactions, including injection site hematoma and injection site warmth and chills.

Overall, the safety profile observed in the VISION study was consistent with the safety profile in PSMA-PreRP and PSMA-BCR studies.

7 DRUG INTERACTIONS

Androgen deprivation therapy and other therapies targeting the androgen pathway

Androgen deprivation therapy (ADT) and other therapies targeting the androgen pathway, such as androgen receptor antagonists, can result in changes in uptake of gallium Ga 68 gozetotide in prostate cancer. The effect of these therapies on performance of gallium Ga 68 gozetotide PET has not been established.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

ILLUCCIX is not indicated for use in females. There are no available data with gallium Ga 68 gozetotide injection use in pregnant women to evaluate for a drug-associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. All radiopharmaceuticals, including ILLUCCIX, have the potential to cause fetal harm depending on the fetal stage of development and the magnitude of the radiation dose. Animal reproduction studies have not been conducted with gallium Ga 68 gozetotide.

8.2 Lactation

Risk Summary

ILLUCCIX is not indicated for use in females. There are no data on the presence of

gallium Ga 68 gozetotide in human milk, the effect on the breastfed infant, or the effect on milk production.

8.4 Pediatric Use

The safety and effectiveness of gallium Ga 68 gozetotide in pediatric patients have not been established.

8.5 Geriatric Use

The efficacy of gallium Ga 68 gozetotide PET in geriatric patients with prostate cancer is based on data from three prospective studies *[see Clinical Studies(14)]* .

Of the total number of subjects in the PSMA-PreRP and PSMA-BCR studies, 691 of 960 (72%) patients were 65 years of age and older while 195 (20%) were 75 years of age and older.

Of the total number of subjects in the VISION study, 752 of 1003 (75%) patients were 65 years of age and older while 284 (28%) were 75 years of age and older.

The efficacy and safety profiles of gallium Ga 68 gozetotide appear similar in younger adult and geriatric patients with prostate cancer and other reported clinical experience has not identified differences in responses between the elderly and younger adult patients.

10 OVERDOSAGE

In the event of an overdose of gallium Ga 68 gozetotide, reduce the radiation absorbed dose to the patient where possible by increasing the elimination of the drug from the body using hydration and frequent bladder voiding. A diuretic might also be considered. If possible, an estimate of the radiation effective dose given to the patient should be made.

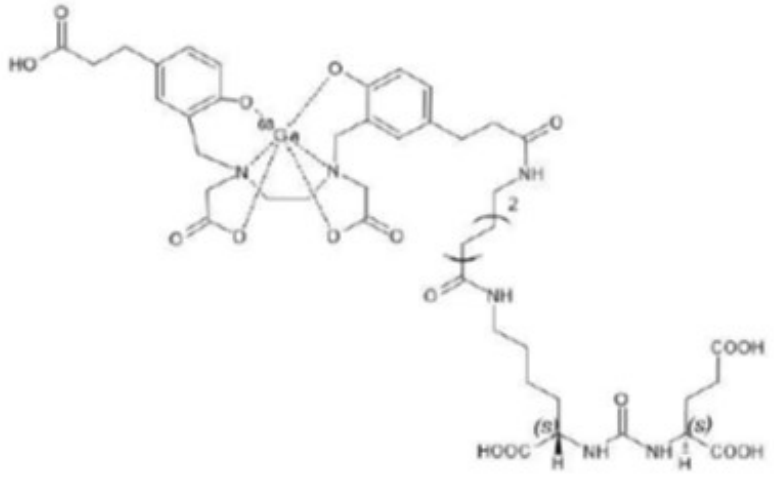
11 DESCRIPTION

11.1 Chemical Characteristics

ILLUCCIX, a radioactive diagnostic agent, is supplied as a sterile, multiple-dose kit for the preparation of Gallium Ga 68 Gozetotide Injection for intravenous use. Gozetotide is also known as PSMA-11.

Gallium Ga 68 gozetotide is a radioconjugate composed of a human prostate specific membrane antigen (PSMA)-targeting ligand peptide conjugated via the acyclic radiometal chelator, N,N'-bis [2-hydroxy-5-(carboxyethyl)benzyl] ethylenediamine-N,N'-diacetic acid (HBED-CC) to the radioisotope Ga 68. The amino acid sequence of the gozetotide peptide is Glu-NH-CO-NH-Lys(Ahx), (Ahx = 6-aminohexanoic acid). Gallium Ga 68 gozetotide has a molecular weight of 1011.9 g/mol and its chemical structure is shown in Figure 4.

Figure 4: Chemical Structure of Gallium Ga 68 Gozetotide



11.2 Physical Characteristics

ILLUCCIX is supplied as a 3-vial kit which contains the non-radioactive ingredients needed to produce Gallium Ga 68 Gozetotide Injection. There are two configurations available to allow preparation of Gallium Ga 68 Gozetotide Injection using Ga 68 from different generator or cyclotron sources [*see How Supplied/Storage and Handling (16)*]. The prepared Gallium Ga 68 Gozetotide Injection for intravenous use is a sterile, pyrogen free, clear, colorless, buffered solution with a pH between 4.0 to 5.0.

11.3 External Radiation

Table 4, Table 5, and Table 6display the principal radiation emission data, radiation attenuation by lead shielding, and physical decay of Ga 68.

Table 4: Principal Radiation Emission Data (>1%)

Radiation/ Emission	% Disintegration	Mean Energy (MeV)
beta+	88%	0.8360
beta+	1.1%	0.3526
gamma	178%	0.5110
gamma	3.0%	1.0770
X-ray	2.8%	0.0086
X-ray	1.4%	0.0086

Table 5: Radiation Attenuation of 511 keV Photons by Lead (Pb) Shielding

Shield Thickness (Pb) mm	Coefficient of Attenuation
6	0.5
12	0.25
17	0.1
34	0.01
51	0.001

Table 6: Physical Decay Chart for Ga 68

Minutes	Fraction Remaining
0	1
15	0.858
30	0.736
60	0.541
90	0.398
120	0.293
180	0.158
360	0.025

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Gallium Ga 68 gozetotide binds to PSMA. It binds to cells that express PSMA, including malignant prostate cancer cells, which usually overexpress PSMA. Gallium 68 (Ga 68) is a β+ emitting radionuclide that allows positron emission tomography.

12.2 Pharmacodynamics

The relationship between gallium Ga 68 gozetotide plasma concentrations and successful imaging was not explored in clinical trials.

12.3 Pharmacokinetics

Distribution

Intravenously injected gallium Ga 68 gozetotide is cleared from the blood and is accumulated preferentially in the liver (15%), kidneys (7%), spleen (2%), and salivary glands (0.5%). Gallium Ga 68 gozetotide uptake is also seen in the adrenals and prostate. There is no uptake in the cerebral cortex or in the heart, and usually lung uptake is low.

Elimination

A total of 14% of the injected dose is excreted in urine in the first 2 hours post-injection.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

No long-term animal studies were performed to evaluate the carcinogenicity potential of gallium Ga 68 gozetotide.

14 CLINICAL STUDIES

14.1 Imaging Prior to Initial Definitive Therapy

The efficacy of ILLUCCIX for PET of PSMA-positive lesions in men with prostate cancer with suspected metastasis who are candidates for initial definitive therapy has been established based on a study of another formulation of gallium Ga 68 gozetotide. Below

is a display of the results of the prospective, open label study PSMA-PreRP (NCT03368547 and NCT02919111).

This two-center study enrolled 325 patients with biopsy-proven prostate cancer who were considered candidates for prostatectomy and pelvic lymph node dissection. All enrolled patients met at least one of the following criteria: serum prostate-specific antigen (PSA) of at least 10 ng/mL, tumor stage cT2b or greater, or Gleason score greater than 6. Each patient received a single gallium Ga 68 gozetotide PET/CT or PET/MR from mid-thigh to skull base.

A total of 123 patients (38%) proceeded to standard-of-care prostatectomy and template pelvic lymph node dissection and had sufficient histopathology data for evaluation (evaluable patients). Three members of a pool of six central readers independently interpreted each PET scan for the presence of abnormal gallium Ga 68 gozetotide uptake in pelvic lymph nodes located in the common iliac, external iliac, internal iliac, and obturator subregions bilaterally as well as in any other pelvic location. The readers were blinded to all clinical information except for the history of prostate cancer prior to definitive treatment. Extrapelvic sites and the prostate gland itself were not analyzed in this study. For each patient, gallium Ga 68 gozetotide PET results and reference standard histopathology obtained from dissected pelvic lymph nodes were compared by region (left hemipelvis, right hemipelvis, and other).

For the 123 evaluable patients, the mean age was 65 years (range 45 to 76 years), and 89% were white. The median serum PSA was 11.8 ng/mL. The summed Gleason score was 7 for 44%, 8 for 20%, and 9 for 31% of the patients, with the remainder of the patients having Gleason scores of 6 or 10.

Table 7compares majority PET reads to pelvic lymph node histopathology results at the patient-level with region matching, such that at least one true positive region defines a true positive patient. As shown, approximately 24% of subjects studied were found to have pelvic nodal metastases based on histopathology (95% confidence interval: 17%, 32%).

Table 7: Patient-Level Performance of Gallium Ga 68 Gozetotide PET for Detection of Pelvic Lymph Node Metastasis* in the PSMA-PreRP Study (n=123)

		Histopathology		**Predictive value** (95% CI)**
		Positive	**Negative**	
PET scan	**Positive**	14	9	PPV 61% (41%, 81%)
	Negative	16	84	NPV 84% (79%, 91%)
Total		30	93	
Diagnostic performance (95% CI)		Sensitivity 47% (29%, 65%)	Specificity 90% (84%, 96%)	

*with region matching where at least one true positive region defines a true positive patient

**PPV: positive predictive value, NPV: negative predictive value

Among the pool of six readers, sensitivity ranged from 36% to 60%, specificity from 83% to 96%, positive predictive value from 38% to 80%, and negative predictive value from 80% to 88%.

In an exploratory subgroup analysis based on summed Gleason score, there was a numerical trend toward more true positives in patients with Gleason score of 8 or higher compared to those with Gleason score of 7 or lower.

An exploratory analysis was performed to estimate the sensitivity and specificity for pelvic nodal metastasis detection in all scanned patients, including the patients who were lacking histopathology reference standard. An imputation method was used based on patient-specific factors. This exploratory analysis resulted in an imputed sensitivity of 47%, with a 95% confidence interval ranging from 38% to 55%, and an imputed specificity of 74%, with a 95% confidence interval ranging from 68% to 80% for all patients imaged with gallium Ga 68 gozetotide PET.

14.2 Imaging Prior to Suspected Recurrence Therapy

The efficacy of ILLUCCIX for PET of PSMA-positive lesions in men with prostate cancer with suspected recurrence based on elevated serum PSA level has been established based on a study of another formulation of gallium Ga 68 gozetotide. Below is a display of the results of the prospective, open label study PSMA-BCR (NCT02940262 and NCT02918357).

This two-center study enrolled 635 patients with biochemical evidence of recurrent prostate cancer after definitive therapy, defined by serum PSA of >0.2 ng/mL more than 6 weeks after prostatectomy or by an increase in serum PSA of at least 2 ng/mL above nadir after definitive radiotherapy. All patients received a single gallium Ga 68 gozetotide PET/CT or PET/MR from mid-thigh to skull base. Three members of a pool of nine independent central readers evaluated each scan for the presence and regional location (20 subregions grouped into four regions) of abnormal gallium Ga 68 gozetotide uptake suggestive of recurrent prostate cancer. The readers were blinded to all clinical information other than type of primary therapy and most recent serum PSA level.

A total of 469 patients (74%) had at least one positive region detected by gallium Ga 68 gozetotide PET majority read. The distribution of gallium Ga 68 gozetotide PET positive regions was 34% bone, 25% prostate bed, 25% pelvic lymph node, and 17% extrapelvic soft tissue. Two hundred and ten patients had composite reference standard information collected in a PET positive region (evaluable patients), consisting of at least one of the following: histopathology, imaging (bone scintigraphy, CT, or MRI) acquired at baseline or within 12 months after gallium Ga 68 gozetotide PET, or serial serum PSA. Composite reference standard information for gallium Ga 68 gozetotide PET negative regions was not systematically collected in this study.

In the 210 evaluable patients, the mean age was 70 years (range 49 to 88 years) and 82% were 65 years of age or older. White patients made up 90% of the group. The median serum PSA was 3.6 ng/mL. Prior treatment included radical prostatectomy in 64% and radiotherapy in 73%.

Of the 210 evaluable patients, 192 patients (91%) were found to be true positive in one or more regions against the composite reference standard (95% confidence interval: 88%, 95%). Among the pool of nine readers used in the study, the proportion of

patients who were true positive in one or more regions ranged from 82% to 97%. The prostate bed had the lowest proportion of true positive results at the region-level (76% versus 96% for non-prostate regions).

An exploratory analysis was also performed in which gallium Ga 68 gozetotide PET positive patients who lacked reference standard information were imputed using an estimated likelihood that at least one location-matched PET positive lesion was reference standard positive based on patient-specific factors. In this exploratory analysis, 340 of 475 patients (72%) were imputed as true positive in one or more regions (95% confidence interval: 68%, 76%).

In another exploratory analysis using the same imputation approach for PET positive patients who lacked reference standard information, 340 of 635 patients (54%) were correctly detected as true positive (95% confidence interval: 50%, 57%) among all BCR patients who received a PET scan, whether it was read as positive or negative.

The likelihood of identifying a gallium Ga 68 gozetotide PET positive lesion in this study generally increased with higher serum PSA level. Table 8shows the patient-level gallium Ga 68 gozetotide PET results stratified by serum PSA level. The mean time between PSA measurement and PET scan was 40 days with a range of 0 to 367 days. Percent PET positivity was calculated as the proportion of patients with a positive gallium Ga 68 gozetotide PET out of all patients scanned. Percent PET positivity includes patients determined to be either true positive or false positive as well as those in whom such determination was not made due to the absence of composite reference standard data.

Table 8: Patient-Level Gallium Ga 68 Gozetotide PET Results and Percent PET Positivity Stratified by Serum PSA Level in the PSMA-BCR Study (n=628)*

PSA (ng/mL)	**PET positive patients**				**PET negative patients**	**Percent PET positivity*** (95% CI)**
	Total	TP**	FP**	Without reference standard		
		With reference standard				
<0.5	48	11	1	36	87	36% (27%, 44%)
		12				
≥0.5 and <1	44	15	3	26	35	56% (45%, 67%)
		18				
≥1 and <2	71	29	1	41	15	83% (75%, 91%)
		30				
≥2	299	137	13	149	29	91% (88%, 94%)
		150				
Total	462	192	18	252	166	74% (70%, 77%)
		210				

*7 patients were excluded from this table due to protocol deviations

**TP: true positive, FP: false positive

***Percent PET positivity = PET positive patients/total patients scanned

14.3 Imaging to Select Patients for Lutetium Lu 177 Vipivotide Tetraxetan

Therapy

The efficacy of ILLUCCIX for selecting patients for lutetium Lu 177 vipivotide tetraxetan therapy has been established based on a study of another formulation of gallium Ga 68 gozetotide. Below is a display of the results of the VISION study (NCT03511664), a randomized (2:1), multicenter, open-label trial evaluating lutetium Lu 177 vipivotide tetraxetan plus best standard of care (BSoC; N=551) or BSoC alone (N=280) in men with progressive metastatic castration resistant prostate cancer (mCRPC). Gallium Ga 68 gozetotide was used to identify PSMA-positive patients on PET imaging. Only PSMA-positive patients were eligible for randomization and receipt of lutetium Lu 177 vipivotide tetraxetan.

A total of 1,003 adult male patients with mCRPC received gallium Ga 68 gozetotide by intravenous administration and underwent PET imaging approximately 60 minutes (range 50 to 100 minutes) after injection. Gallium Ga 68 gozetotide PET imaging was interpreted in conjunction with post-contrast CT and/or MRI of the chest, abdomen, and pelvis for all patients, and in addition to brain MRI and/or CT in patients with history of CNS metastasis.

Patients were of median age 70 years (range: 40 to 94), white (87%), black or African American (7%) and Asian (2.4%) and had median baseline serum PSA levels of 74 ng/mL (range: 0 to 8995 ng/mL).

Gallium Ga 68 gozetotide PET and anatomical imaging was interpreted by one central reader who was blinded to clinical information and other PET and bone imaging. PSMA-positive (eligible) patients were defined as those having at least one tumor lesion with gallium Ga 68 gozetotide uptake greater than normal liver and all tumor lesions larger than size criteria with gallium Ga 68 gozetotide uptake greater than liver [short axis size criteria: organs ≥1 cm, lymph nodes ≥2.5 cm, bones (soft tissue component) ≥1 cm]. Of the patients evaluated by the central reader, 869 (87%) were found to be PSMA-positive (eligible) and 126 (13%) were found to be PSMA-negative (ineligible) for lutetium Lu 177 vipivotide tetraxetan therapy.

A reader sub-study evaluated imaging interpretation agreement. Among the 869 patients found eligible and 126 patients found ineligible for therapy, 75 and 50, respectively, were selected at random (total of 125). Gallium Ga 68 gozetotide PET and anatomical imaging from these 125 patients was interpreted by three additional central readers (re-readers) who were blinded to clinical information and other PET and bone imaging. Imaging from 20 of the 125 patients was also randomly selected to assess intra-reader reproducibility. The estimated inter-reader Fleiss κ was 0.60 (95% CI: 0.50, 0.70) across the three re-readers, while the estimated intra-reader Cohen κ was 0.78 (95% CI: 0.49, 0.99), 0.76 (95% CI: 0.46, 0.99) and 0.89 (95% CI: 0.67, 0.99) for each re-reader.

Given the observed levels of inter-reader agreement, patient's PSMA interpretations were further evaluated by eligibility and eligibility sub-criteria. Of the 125 patients with four readers (reader and re-readers), at least one reader found the patient to be PSMA-negative for lutetium Lu 177 vipivotide tetraxetan therapy in 59 patients. All four readers agreed in 20 of the 59 patients (34% reader unanimity). Based on the sub-criteria involving evaluation of any one tumor lesion and evaluation of all lesions larger than size criteria, at least one reader found the patient to be PSMA-negative in 21 patients (43% reader unanimity) and 45 patients (16% reader unanimity), respectively *[see Warnings and Precautions (5.1)]*.

16 HOW SUPPLIED/STORAGE AND HANDLING

How Supplied

ILLUCCIX is supplied as a kit for preparing Gallium Ga 68 Gozetotide Injection. There are two different kit configurations, each containing 3 vials.

ILLUCCIX Configuration "A" (NDC 74725-100-25) is intended for use with Ga 68 produced from a cyclotron and purified via GE FASTlab or Eckert & Ziegler GalliaPharm Ge 68/Ga 68 generator and includes:

- Vial 1 (Gozetotide Vial): contains 25 mcg gozetotide and 10 mcg D-mannose as a lyophilized powder in a sterile 10 mL vial with a blue flip-off cap (NDC 74725-101-25).
- Vial 2 (Acetate Buffer Vial, Configuration A): contains 150 mg anhydrous sodium acetate in 0.292 M HCl solution (2.5 mL volume) in a sterile 10 mL vial with a red flip off cap (NDC 74725-102-25).
- Vial 3 (Sterile Vacuumed Reaction Vial): an evacuated sterile vial with white flip off cap used to collect Ga 68 chloride from generators or cyclotron and radiolabeling reaction; a multiple-dose vial after radiolabeling.

ILLUCCIX Configuration "B" (NDC 74725-100-64) is intended for use with Ga 68 produced from an IRE Galli Eo Ge 68/Ga 68 generator and includes:

- Vial 1 (Gozetotide Vial): contains 25 mcg gozetotide and 10 mcg D-mannose as a lyophilized powder in a sterile 10 mL vial with a blue flip-off cap (NDC 74725-101-25).
- Vial 2 (Acetate Buffer Vial, Configuration B): contains 150 mg anhydrous sodium acetate in 0.175 M HCl solution (6.4 mL volume) in a sterile 10 mL vial with a green flip off cap (NDC 74725-103-64).
- Vial 3 (Sterile Vacuumed Reaction Vial): an evacuated sterile vial with white flip off cap used to collect Ga 68 chloride from generator and radiolabeling reaction; a multiple-dose vial after radiolabeling.

The radionuclide is not part of the kit. Before radiolabeling with Ga 68, the contents of this kit are not radioactive.

Storage and Handling

Store ILLUCCIX refrigerated upright in the original packaging at 2° to 8°C (36° to 46°F).Do not freeze

After radiolabeling, keep Gallium Ga 68 Gozetotide Injection upright with appropriate shielding to protect from radiation at ambient temperature (25°C (77°F); excursions permitted to 15°C to 30°C (59°F to 86°F)). Use Gallium Ga 68 Gozetotide Injection within 4 hours of preparation.

This preparation is approved for use by persons under license by the Nuclear Regulatory Commission or the relevant regulatory authority of an Agreement State.

17 PATIENT COUNSELING INFORMATION

Adequate Hydration

Instruct patients to drink a sufficient amount of water to ensure adequate hydration before their PET study and urge them to drink and urinate as often as possible during

the first hours following the administration of Gallium Ga 68 Gozetotide Injection, in order to reduce radiation exposure *[see Dosage and Administration (*2.3*) and Warnings and Precautions (*5.2*)]*.

Manufactured by:

Grand River Aseptic Manufacturing

140 Front Ave SW

Grand Rapids, MI 49504

Distributed by:

Telix Pharmaceuticals (US) Inc.

Fishers, IN 46037

PRINCIPAL DISPLAY PANEL - Kit Carton - Configuration A

NDC 74725-100-25
Rx-Only

illuccix ®
(kit for the preparation of gallium
Ga 68 gozetotide Injection)

25 mcg/vial gozetotide

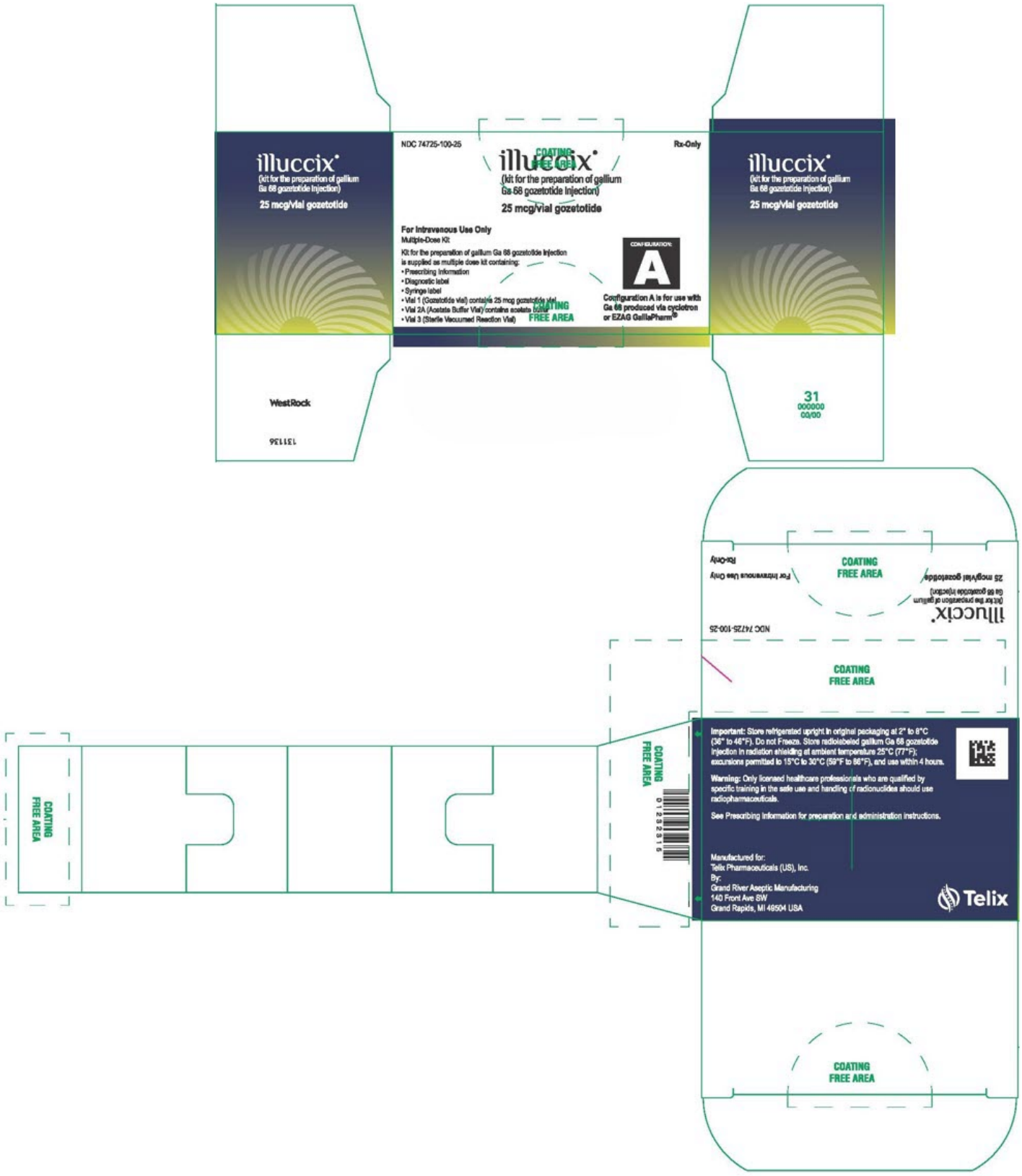
For Intravenous Use Only
Multiple-Dose Kit

Kit for the preparation of gallium Ga 68 gozetotide Injection is supplied as multiple dose kit containing:

- Prescribing Information
- Diagnostic label
- Syringe label
- Vial 1 (Gozetotide vial) contains 25 mcg gozetotide vial
- Vial 2A (Acetate Buffer Vial) contains acetate buffer
- Vial 3 (Sterile Vacuumed Reaction Vial)

CONFIGURATION:
A

Configuration A is for use with
Ga 68 produced via cyclotron
or EZAG GalliaPharm ®



PRINCIPAL DISPLAY PANEL - Kit Carton - Configuration B

NDC 74725-100-64

Rx Only

illuccix ®

(kit for the preparation of gallium
Ga 68 gozetotide Injection)

25 mcg/vial gozetotide

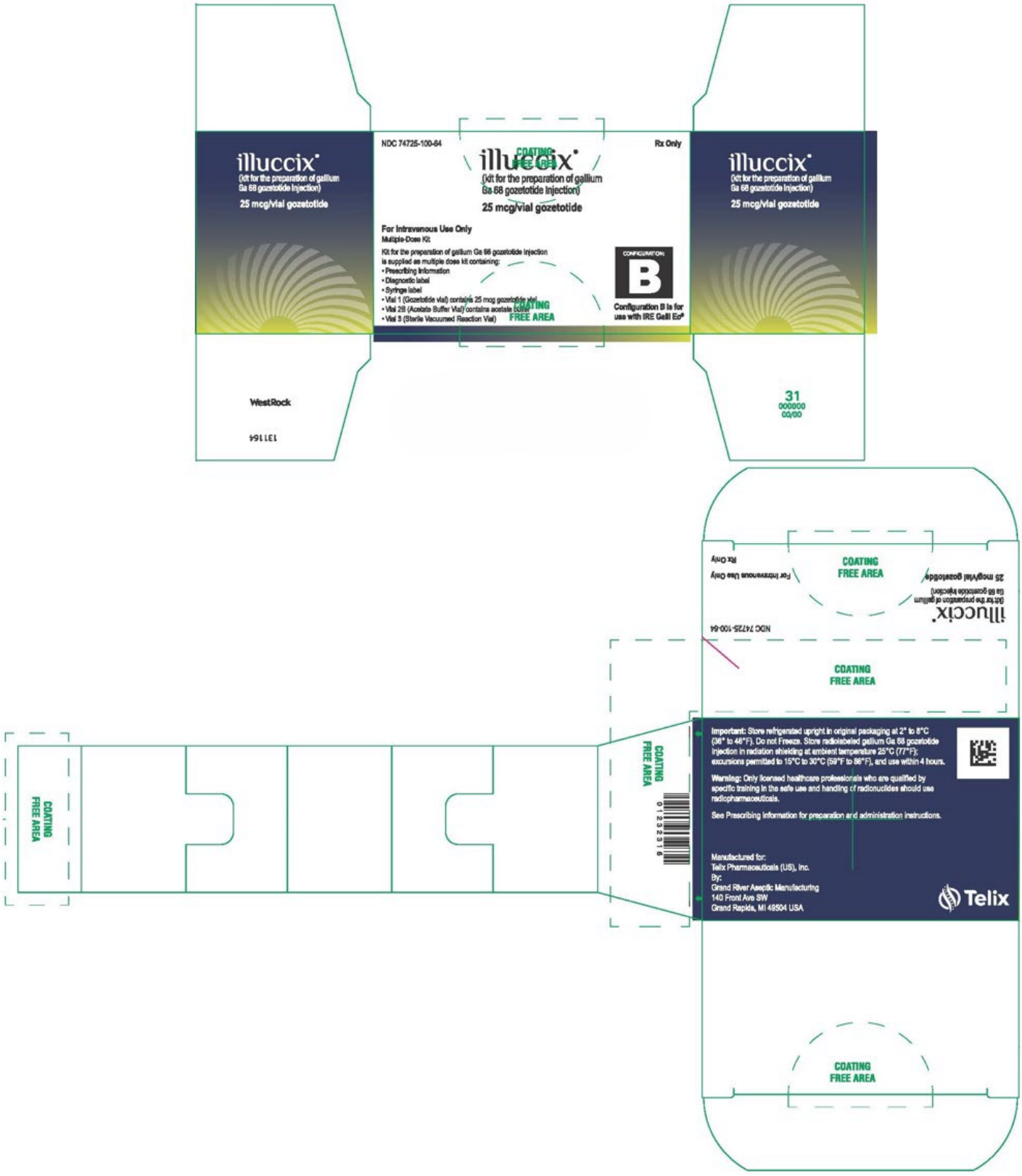
For Intravenous Use Only
Multiple-Dose Kit

Kit for the preparation of gallium Ga 68 gozetotide Injection is supplied as multiple dose kit containing:

- Prescribing Information
- Diagnostic label
- Syringe label
- Vial 1 (Gozetotide vial) contains 25 mcg gozetotide vial
- Vial 2B (Acetate Buffer Vial) contains acetate buffer
- Vial 3 (Sterile Vacuumed Reaction Vial)

CONFIGURATION:
B

Configuration B is for
use with IRE Galli Eo ®



ILLUCCIX

kit for the preparation of gallium ga 68 gozetotide injection kit

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:74725-100

Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:74725-100-25	1 in 1 CARTON	12/17/2021	
2	NDC:74725-100-64	1 in 1 CARTON	12/17/2021	

Quantity of Parts		
Part #	Package Quantity	Total Product Quantity
Part 1	1 VIAL, MULTI-DOSE	1
Part 2	1 VIAL, MULTI-DOSE	2.5 mL
Part 3	1 VIAL, MULTI-DOSE	6.4 mL

Part 1 of 3

GOZETOTIDE

psma-11 injection, powder, lyophilized, for solution

Product Information	
Item Code (Source)	NDC:74725-101
Route of Administration	INTRAVENOUS

Active Ingredient/Active Moiety		
Ingredient Name	Basis of Strength	Strength
GOZETOTIDE (UNII: 9AG41L3AOQ) (GOZETOTIDE - UNII:9AG41L3AOQ)	GOZETOTIDE	25 ug

Inactive Ingredients	
Ingredient Name	Strength
DEMANNOSE (UNII: PHA4727WTP)	10 ug

Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:74725-101-25	1 in 1 VIAL, MULTI-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA214032	12/17/2021	

Part 2 of 3

ACETATE BUFFER- CONFIGURATION A

sodium acetate anhydrous solution

Product Information	
Item Code (Source)	NDC:74725-102
Route of Administration	INTRAVENOUS

Inactive Ingredients	
Ingredient Name	**Strength**
WATER (UNII: 059QF0KO0R)	
SODIUM ACETATE ANHYDROUS (UNII: NVG71ZZ7P0)	150 mg in 2.5 mL
HYDROCHLORIC ACID (UNII: QTT17582CB)	

Packaging				
#	**Item Code**	**Package Description**	**Marketing Start Date**	**Marketing End Date**
1	NDC:74725-102-25	2.5 mL in 1 VIAL, MULTI-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA214032		

Part 3 of 3

ACETATE BUFFER- CONFIGURATION B

sodium acetate anhydrous solution

Product Information	
Item Code (Source)	NDC:74725-103
Route of Administration	INTRAVENOUS

Inactive Ingredients	
Ingredient Name	**Strength**

WATER (UNII: 059QF0KO0R)	
SODIUM ACETATE ANHYDROUS (UNII: NVG71ZZ7P0)	150 mg in 6.4 mL
HYDROCHLORIC ACID (UNII: QTT17582CB)	

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:74725-103-64	6.4 mL in 1 VIAL, MULTI-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA214032		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA214032	12/17/2021	

Labeler - Telix Pharmaceuticals (US) Inc. (116991792)

Establishment

Name	Address	ID/FEI	Business Operations
Telix Innovations		370765512	analysis(74725-101)

Revised: 9/2024 Telix Pharmaceuticals (US) Inc.