BEQVEZ- fidanacogene elaparvovec-dzkt
Pfizer Laboratories Div Pfizer Inc

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

BEQVEZ™ (fidanacogene elaparvovec-dzkt) injection, for intravenous infusion
Initial U.S. Approval: 2024

INDICATIONS AND USAGE

BEQVEZ is an adeno-associated virus vector-based gene therapy indicated for the treatment of adults with moderate to severe hemophilia B (congenital factor IX deficiency) who:

- Currently use factor IX prophylaxis therapy, or
- Have current or historical life-threatening hemorrhage, or
- Have repeated, serious spontaneous bleeding episodes, and,
- Do not have neutralizing antibodies to adeno-associated virus serotype Rh74var (AAVRh74var) capsid as detected by an FDA-approved test. (1)

DOSAGE AND ADMINISTRATION

For one-time single-dose intravenous infusion only. (2)

- Perform baseline testing to select patients, including testing for pre-existing antibodies to AAVRh74var, factor IX inhibitor presence, and liver health tests. (2.1)
- The recommended dose of BEQVEZ is 5×10^{11} vector genomes per kg (vg/kg) of body weight. Dose based on adjusted body weight for those with a BMI >30 kg/m^2. (2.1)
- Administer BEQVEZ as an intravenous infusion after dilution in 0.9% sodium chloride with 0.25% human serum albumin (HSA) with a final volume of 200 mL over approximately 60 minutes. (2.3)

DOSAGE FORMS AND STRENGTHS

BEQVEZ is a suspension for intravenous infusion after dilution. (3)
BEQVEZ has a nominal concentration of 1×10^{13} vg/mL, and each vial contains an extractable volume of 1 mL. (3)
The total number of vials will be customized to meet dosing requirements for individual patients based on their weight. (3)

CONTRAINDICATIONS

None. (4)

WARNINGS AND PRECAUTIONS

- Hepatotoxicity: Monitor transaminases and factor IX activity levels once or twice weekly for at least 4 months after BEQVEZ administration to mitigate the risk of potential hepatotoxicity. Consider corticosteroid treatment for transaminase elevation or a decline in factor IX activity. (2.3, 5.1)
- Infusion Reactions: Monitor during administration and for at least 3 hours after end of infusion. If symptoms occur, slow or stop administration. Restart infusion at a slower rate once reaction has resolved. (5.2)
- Malignancy: Monitor patients with risk factors for hepatocellular carcinoma (e.g., hepatitis B or C, non-alcoholic fatty liver disease, chronic alcohol consumption, non-alcoholic steatohepatitis, advanced age) with regular liver ultrasound (e.g., annually) and alpha-fetoprotein testing for 5 years following administration. In the event that a malignancy occurs after treatment with BEQVEZ, contact Pfizer Inc. at 1-800-438-1985. (5.3)
- Monitoring laboratory tests: Monitor for factor IX activity and factor IX inhibitors. (5.4)

ADVERSE REACTIONS

The most common adverse reaction (incidence ≥5%) was an increase in transaminases. (6)

To report SUSPECTED ADVERSE REACTIONS, contact Pfizer Inc. at 1-800-438-1985 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

USE IN SPECIFIC POPULATIONS

- There is limited information on the safety and effectiveness of BEQVEZ in patients with HIV infection. (8.8)
- The safety and effectiveness of BEQVEZ in patients with prior or active factor IX inhibitors have not been established. (8.9)

See 17 for PATIENT COUNSELING INFORMATION.

Revised: 4/2024

FULL PRESCRIBING INFORMATION: CONTENTS*

* Sections or subsections omitted from the full prescribing information are not listed.

FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

BEQVEZ is an adeno-associated virus vector-based gene therapy indicated for the treatment of adults with moderate to severe hemophilia B (congenital factor IX deficiency) who:

- Currently use factor IX prophylaxis therapy, or
- Have current or historical life-threatening hemorrhage, or
- Have repeated, serious spontaneous bleeding episodes, and,
- Do not have neutralizing antibodies to adeno-associated virus serotype Rh74var (AAVRh74var) capsid as detected by an FDA-approved test.

Select patients for therapy based on an FDA-approved companion diagnostic for BEQVEZ *[see Dosage and Administration (2)].*

2 DOSAGE AND ADMINISTRATION

For one-time single-dose intravenous infusion only.

Initiate and administer BEQVEZ in hospitals and other clinical centers under the supervision of a physician experienced in the treatment of hemophilia.

For Patient Selection

Perform testing for pre-existing neutralizing antibodies to AAVRh74var using the FDA-approved companion diagnostic. DO NOT administer BEQVEZ to patients with a positive test for antibodies to AAVRh74var *[see Indications and Usage (1) and Clinical Studies (14)]*.

Information on FDA-approved tests for the detection of AAVRh74var pre-existing neutralizing antibodies is available at http://www.fda.gov/companiondiagnostics.

- Perform factor IX (FIX) inhibitor testing prior to infusion. DO NOT administer BEQVEZ to patients with a positive test (≥0.6 Bethesda Units [BU]) or a prior history for factor IX inhibitor.
- Perform HIV testing prior to infusion. DO NOT administer BEQVEZ to patients with either CD4+ cell count <200 mm^3 or viral load ≥20 copies/mL in case of serological evidence of HIV-1 or HIV-2 infection.
- DO NOT administer BEQVEZ to patients with hypersensitivity to factor IX replacement product.
- Perform liver health assessments, which include:
    - Liver function tests (alanine transaminase [ALT], aspartate transaminase [AST], alkaline phosphatase [ALP], bilirubin, albumin).
    - Laboratory tests for active hepatitis B or C.

- Elastography and/or ultrasound and other laboratory assessments for liver fibrosis.
- DO NOT administer BEQVEZ to patients with current liver-related coagulopathy, hypoalbuminemia, persistent jaundice, or cirrhosis), portal hypertension, splenomegaly, hepatic encephalopathy, hepatic fibrosis, or active viral hepatitis.
- In case of radiological liver abnormalities and/or sustained liver enzyme elevations, consider a consultation with hepatologist to assess eligibility for BEQVEZ *[see Warnings and Precautions (5.1)].*

2.1 Dose

The recommended dose of BEQVEZ is a single-dose intravenous infusion of 5×10^{11} vector genomes per kg (vg/kg) of body weight.

To determine the patient's required dose, the following calculation steps are needed:

1. Calculation of patient's dose weight

The dosing of BEQVEZ is based on the patient's body mass index (BMI) in kg/m^2.

Patient's BMI	**Patient's Dose Weight**
≤30 kg/m^2	Dose Weight = Actual body weight
>30 kg/m^2	Determine using the following calculation: Dose Weight (kg) = 30 $kg/m^2 \times [\text{Height (m)}]^2$

2. Calculation of patient's dose volume in milliliters (mL)

Dose weight in kilograms (kg) divided by 20 = dose in mL

The division factor 20 represents the amount of vector genomes per mL of the BEQVEZ suspension (1×10^{13} vg/mL) divided by the per kilogram dose (5×10^{11} vg/kg).

Examples of dose volume calculation:

Patient's Weight, Height, and BMI	**Patient's Dose Weight Calculation if BMI >30 kg/m^2**	**Patient's Dose Weight**	**Patient's Dose Volume (Body Weight Divided by 20)**
80 kg, 1.84 m 23.6 kg/m^2	No adjustment	80 kg	4 mL
120 kg, 1.84 m 35.4 kg/m^2	30 $kg/m^2 \times [1.84$ (m)$]^2$	101.6 kg	5.08 mL

For the number of vials required *[see How Supplied/Storage and Handling (16.1)]*.

2.2 Preparation

General Precautions Before Handling or Administering BEQVEZ

- BEQVEZ contains genetically modified vectors. Personal protective equipment (including gloves, safety goggles, laboratory coat and sleeves) should be worn while

preparing or administering BEQVEZ.
- Confirm that the patient's identity matches the patient-specific identifier number on the outer carton.
- Prepare BEQVEZ for intravenous infusion by diluting in 0.9% sodium chloride with 0.25% human serum albumin (HSA).

Preparation of Diluent Solution (0.9% Sodium Chloride with 0.25% HSA)

- HSA used for preparation of this product must be commercially available and comply with all local and regional compendia. Either 20% w/v or 25% w/v HSA is recommended.
- Calculate the volume of HSA required to achieve a final concentration of 0.25% w/v HSA in a 200 mL final infusion volume.
- Calculate the volume of BEQVEZ required for the patient-specific treatment.
- Calculate the volume of 0.9% sodium chloride required to achieve a final infusion volume of 200 mL when combined with BEQVEZ and HSA.
- Combine the calculated volume of HSA with the calculated volume of 0.9% sodium chloride in an appropriate intravenous (IV) infusion bag. Materials compatible with BEQVEZ are listed below:

Component	**Material of Construction**
Intravenous (IV) infusion container	Polyvinyl chloride (PVC), ethylene vinyl acetate (EVA), polyolefin (polyethylene and/or polypropylene)
Infusion set (line material)	Polyvinyl chloride (PVC), polybutadiene, polyurethane, polyethylene

- Mix the diluent solution gently. Do not shake. Incubate the diluent solution in the infusion bag at room temperature (15 °C to 30 °C [59 °F to 86 °F]) for at least 10 minutes prior to adding BEQVEZ *[see How Supplied/Storage and Handling (16.2)].*

Product Vial Thawing

- Store in the original package to avoid direct sunlight and ultraviolet light exposure.
- Store BEQVEZ upright in the original package. If cartons or individual vials are tipped over or inverted during storage and handling, place the carton or individual vials back in the upright orientation immediately.
- Remove the inner carton from the outer carton.
- Thaw BEQVEZ vials for 1 hour at room temperature 15 °C to 30 °C (59 °F to 86 °F) in the upright orientation in the inner carton.
- Vials may be gently swirled but not shaken or inverted.
- Prior to use, ensure that visible ice crystals are not present in the suspension.
- The total time at room temperature between removing vials from frozen storage until the beginning of dose preparation should be no more than 3 hours.
- Do not re-freeze vials.

Preparation of Suspension for Infusion

- Visually inspect thawed product for particulate matter prior to administration. Do

not use vials that contain visible particulates. The thawed suspension in the vial should appear clear to slightly opalescent, colorless to slightly brown.
- The formulation does not contain a preservative and is for single use only.
- Extract the calculated volume of BEQVEZ from the vials using aseptic technique and sterile componentry.
- Combine the extracted volume of BEQVEZ with the diluent solution (0.9% sodium chloride with 0.25% HSA) for a total infusion volume of 200 mL.
- Gently mix the suspension for infusion. Do not shake.
- The suspension for infusion should be equilibrated to ambient temperature before administration to the patient.

2.3 Administration

Administer BEQVEZ in a setting where personnel and equipment are immediately available to treat infusion-related reactions *[see Warnings and Precautions (5.2)]*.

Administration of Diluted Suspension for Infusion

- Use diluted BEQVEZ within 24 hours of dose preparation.
- An in-line 0.2 µm IV filter may be used for administration.
- Administer diluted suspension for infusion to the patient as a peripheral IV infusion over approximately 60 minutes (approximately 3 mL/min).
- DO NOT administer as an intravenous push or bolus.
- DO NOT infuse the diluted suspension in the same intravenous line with any other products.
- DO NOT use a central line or port.
- In the event of an infusion reaction during administration *[see Warnings and Precautions (5.2)]:*
    - The rate of infusion may be reduced or stopped to manage the infusion reaction.
    - Administer treatment as needed to manage infusion reaction.
    - If the infusion is stopped, restart a slower rate when the infusion reaction has resolved.
    - If the infusion rate needs to be reduced, or stopped and restarted, BEQVEZ should be infused within 24 hours of dose preparation.
- After the entire content of the infusion bag is infused, flush the infusion line using local site procedures.
- For some patients, there will be an extra vial that may not need to be used (for patients who weigh 75-80 kg, 95-100 kg, or 115-120 kg). Dispose of any unused product or waste material in accordance with local guidelines for the handling of biological waste.

General Precautions After Handling or Administering BEQVEZ

BEQVEZ may be transmitted to persons other than the patient receiving the treatment through patient excretions and secretions *[see Clinical Pharmacology (12.3)]*. Temporary vector shedding of intravenously administered AAV-based gene therapies occurs primarily through urine and feces, and to some extent saliva, mucus, and semen.

To minimize the risk of transmission to other persons, instruct patients regarding proper hand hygiene when coming into direct contact with patient secretions or

excretions.

Follow these precautions for 6 months after BEQVEZ infusion, especially in the case of pregnancy or immunodeficiency of close contacts *[see Use in Specific Populations (8.3)]*.

Monitoring Post-Administration

Conduct the following laboratory tests after administration of BEQVEZ:

- Perform ALT, AST as in Table 1 to monitor for liver enzyme elevation which may indicate immune-mediated hepatotoxicity. Liver enzyme elevation may result in decrease in factor IX activity. Perform factor IX activity testing as shown in Table 1.
- In patients with elevated transaminases and/or decline in factor IX activity, continue monitoring transaminases and factor IX activity until transaminases return to baseline and/or factor IX activity has plateaued.

Table 1. Recommended Hepatic Function (ALT and AST) and Factor IX Activity Monitoring

Timeframe	Monitoring Frequency
Weeks 1 to 16	Once or twice weekly
Weeks 17 to 18	Weekly
Weeks 19 to 52 (end of Year 1)	At Weeks 24, 32, 42 and 52
Year 2 to end of Year 3*	Quarterly
Year 4 to end of Year 6	Twice yearly
After Year 6	Annually

It is recommended where possible to use the same laboratory facility for monitoring over time, particularly during the timeframe for corticosteroid treatment decision making, to minimize inter-laboratory variability.

* Starting at Week 65.

- Consider implementing a course of corticosteroids as outlined in Table 2 for any of the following:
    - Single increase in either ALT or AST of ≥1.5-fold from baseline after screening and prior to infusion even if within the normal range.
    - Consecutive increases in transaminases (ALT or AST or both) on 2 subsequent blood tests even if within the normal range.
    - Factor IX activity decrease
        - In the absence of alternative etiology, a decrease that could trigger the risk of bleeding.
        - A decrease in factor IX activity on 2 consecutive blood tests especially if occurring during the first 4 months post-infusion.
- The recommended starting dose of oral corticosteroids is 60 to 100 mg once a day. Start to taper prednisolone/prednisone when the ALT and/or AST have declined for at least 2 consecutive lab draws and/or the levels have begun to normalize and any decline in factor IX activity has plateaued.
- Monitor for and manage adverse reactions secondary to corticosteroid use. Refer to the corticosteroid prescribing information for risks and required precautions.

Table 2. Recommended Treatment Regimen for Oral Corticosteroids

Schedule (oral corticosteroid treatment regimen)	Prednisolone/Prednisone (mg/day)
Week 1	~60 to 100*
Week 2	60†
Week 3	40
Week 4	30
Week 5	30
Week 6	20‡
Week 7	15
Week 8	10

* Based on body weight.
† See the paragraph below this table.
‡ Maintain at 20 mg/day until transaminases return to baseline, then reduce by 5 mg/day until 10 mg/day are achieved then reduce by 2.5 mg/week up to 5 mg daily.

If there is persistent transaminase elevation while on oral corticosteroids treatment alone, consult with a hepatologist as required to discuss use of combined oral and intravenous corticosteroids (methylprednisolone).

- Monitor Factor IX Activity

    - Monitor factor IX activity levels according to Table 1 to confirm adequate endogenous FIX activity levels to support discontinuation of pre-infusion FIX prophylaxis therapy. In the clinical studies, a prophylactic dose of factor IX replacement was given prior to BEQVEZ infusion and following that, patients discontinued prophylaxis. Exogenous factor IX or other hemostatic products may also be required in case of surgery, invasive procedures, trauma, or bleeds in the event that BEQVEZ-derived factor IX activity is deemed insufficient for adequate hemostasis in such situations.
    - The use of different assays may impact test results; therefore, use the same assay and reagents to monitor patients over time, if feasible *[see Warnings and Precautions (5.4)]*.
    - Use of exogenous FIX concentrates before and after BEQVEZ administration may impede assessment of endogenous, BEQVEZ-derived factor IX activity.

- Monitor patients for factor IX inhibitors (neutralizing antibodies to factor IX). Test for factor IX inhibitors especially if bleeding is not controlled, or plasma factor IX activity levels decrease *[see Warnings and Precautions (5.4) and Clinical Pharmacology (12.6)]*.
- Perform regular liver ultrasound (e.g., annually) and alpha-fetoprotein (AFP) testing in patients with risk factors of hepatocellular carcinoma (e.g., hepatitis B or C, non-alcoholic fatty liver disease, chronic alcohol consumption, non-alcoholic steatohepatitis, advanced age) *[see Warnings and Precautions (5.3)]*.

3 DOSAGE FORMS AND STRENGTHS

BEQVEZ is supplied as a clear to slightly opalescent, colorless to slightly brown suspension for intravenous infusion with each mL containing 1×10^{13} vector genomes (vg).

Each vial of BEQVEZ contains 1 mL of extractable volume. The total number of vials will be customized to meet dosing requirements for individual patients based on their weight *[see Dosage and Administration (2.1)]*. Vial contents are to be diluted prior to infusion *[see Dosage and Administration (2.2)]*.

4 CONTRAINDICATIONS

None.

5 WARNINGS AND PRECAUTIONS

5.1 Hepatotoxicity

Intravenous administration of a liver-directed AAV vector could potentially lead to liver transaminase elevations. Transaminase elevations, particularly when observed in the first 4 months after BEQVEZ administration, is presumed to occur due to immune-mediated injury of transduced hepatocytes and may reduce the therapeutic efficacy of the AAV vector-based gene therapy.

In clinical studies with BEQVEZ, transaminase elevations (defined as ≥1.5 x baseline) occurred in 29 of 45 and 7 of 15 patients in study 1 and study 2 respectively. Twenty-eight (62%) patients in clinical study 1 received corticosteroids for transaminase elevation and/or decline in factor IX activity. The mean time to corticosteroid initiation was 45 days. The mean duration of corticosteroid treatment was 113 days (range: 41 to 276 days). Three (20%) patients in clinical study 2 received corticosteroids for transaminase elevation and/or decline in factor IX activity with time to initiation and duration of corticosteroid use within the range seen in clinical study 1.

Monitor ALT, AST and factor IX activity levels once or twice weekly for at least 4 months and institute corticosteroid treatment in response to transaminase elevation and/or decrease in FIX activity, as required *[see Dosage and Administration (2.3)]*. Monitor for and manage adverse reactions secondary to corticosteroid therapy.

For the first year following administration of BEQVEZ, advise patients to limit alcohol consumption, as alcohol may impact liver enzyme elevation and potentially reduce factor IX activity over time.

5.2 Infusion Reactions

Infusion reactions, including hypersensitivity reactions and anaphylaxis, may occur. Symptoms of hypersensitivity may include but are not limited to hypotension, pyrexia, palpitation, nausea, vomiting, chills or headache. Closely monitor patients for clinical signs and symptoms of infusion reactions throughout the infusion period and for at least 3 hours after end of infusion. In the event of an infusion reaction during

administration, the infusion may be slowed or stopped. If the infusion is stopped, restart at a slower rate when the infusion reaction has resolved. Consider treatment with an antihistamine, corticosteroid or other measures for management of an infusion reaction.

5.3 Malignancy

The integration of liver-targeting AAV vector DNA into the genome may carry the theoretical risk of hepatocellular carcinoma development. Integration of AAV vector DNA into the host cell DNA in other tissues may also occur *[see Nonclinical Toxicology (13)].*

Monitor patients with risk factors for hepatocellular carcinoma (e.g., hepatitis B or C, non-alcoholic fatty liver disease, chronic alcohol consumption, non-alcoholic steatohepatitis, advanced age) with regular liver ultrasound (e.g., annually) and alpha-fetoprotein testing for 5 years following BEQVEZ *[see Dosage and Administration (2.3)]*.

In the event that a malignancy occurs, contact Pfizer Inc. at 1-800-438-1985 to obtain instructions on collecting patient samples for testing.

5.4 Monitoring Laboratory Tests

Factor IX Assays

When using an *in vitro* activated partial thromboplastin time (aPTT)-based one-stage clotting assay (OSA) for determining factor IX activity, plasma factor IX activity results can be affected by both the type of aPTT reagent, and the reference standard used in the assay. Higher inter-laboratory and inter-reagent variability in OSA results is observed at the lower factor IX activity levels (0.025 IU/mL). This is important to consider particularly when changing the laboratory and/or reagents used in the assay. It is recommended where possible to use the same laboratory (applicable to both, chromogenic or one-stage assays) for factor IX activity monitoring over time, particularly during the timeframe for corticosteroid treatment decision making, to minimize the impact of inter-laboratory variability *[see Dosage and Administration (2.3)]*.

In clinical study 1 with BEQVEZ, silica-based OSA returned consistently higher values of factor IX activity compared to ellagic acid-based OSA and chromogenic substrate assay (CSA). Generally, values of the ellagic acid-based OSA aligned with values of CSA *[see Table 4, Clinical Pharmacology (12.2)]*.

Based on clinical trials (central laboratory), the approximate conversion factor between a silica-based OSA and ellagic acid-based OSA/CSA is 2. For example, a factor IX activity level of 10 IU/dL using CSA calculates approximately to a level of 20 IU/dL using silica-based OSA. At low factor IX activity levels (0.05 IU/mL) the conversion factor is approximately 2.5.

Factor IX Inhibitors

Monitor patients through appropriate clinical observations and laboratory tests for the development of inhibitors to factor IX after BEQVEZ administration. Perform an assay that detects factor IX inhibitors if bleeding is not controlled, or plasma factor IX activity levels decrease.

6 ADVERSE REACTIONS

The most common adverse reaction (incidence ≥5%) reported in clinical studies was an

increase in transaminases.

6.1 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 BEQVEZ was evaluated in 60 [45 patients in clinical study 1 (NCT03861273) and 15 patients in clinical study 2 (NCT02484092)] patients who received the recommended dose (5×10^{11} vg/kg) in two open-label clinical studies.

No serious adverse reactions were reported in patients treated with BEQVEZ. The most common adverse reactions observed in ≥5% of patients post-dose are listed in Table 3:

Table 3. Adverse Reactions (Incidence ≥5%) Following Treatment with BEQVEZ

Adverse Reactions	Clinical Study 1 Patients (%) (N=45)	Clinical Study 2 Patients (%) (N=15)
Transaminases increased*	24 (53.3%)	2 (13.3%)

* Includes terms alanine transaminase (ALT) increased, aspartate transaminase (AST) increased, hepatic enzyme increased, hepatic function abnormal, liver function test abnormal, transaminases increased.

Not all transaminase elevations were reported as adverse reactions *[see Warnings and Precautions (5.1)]*.

7 DRUG INTERACTIONS

No interaction studies have been performed.

The use of BEQVEZ in patients receiving hepatotoxic medication or using hepatotoxic substances is limited. Use of hepatotoxic medications or substances may reduce the efficacy of BEQVEZ, and the risk of serious hepatic reactions may increase following administration.

Prior to BEQVEZ administration, review the patient's existing medications to determine if they should be modified to prevent anticipated interactions described in this section.

Monitor concomitant medications after BEQVEZ administration and evaluate the need to change concomitant medications based on patient's hepatic status and risk.

Vaccinations

Prior to BEQVEZ infusion, ensure patients are up to date on their vaccinations. If concomitant corticosteroid administration is needed following BEQVEZ infusion, delay administration of live vaccines until the patient has been weaned off corticosteroids *[see Dosage and Administration (2.3)].*

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

BEQVEZ is not intended for administration in women. There are no data from the use of BEQVEZ in pregnant women. No animal reproductive studies have been conducted with BEQVEZ.

In the U.S. general population, the estimated background risk of major birth defect and miscarriage in clinically recognized pregnancies is 2 to 4% and 15 to 20%, respectively.

8.2 Lactation

Risk Summary

There is no information regarding the presence of BEQVEZ in human milk, the effect on the breastfed infant, and the effects on milk production.

BEQVEZ is not intended for administration in women.

8.3 Females and Males of Reproductive Potential

No studies in animals or clinical studies have been performed to evaluate the potential effects of BEQVEZ on fertility in humans.

Contraception

Males

Vector DNA was shed in semen but declined to undetectable levels in semen within a mean of 1 to 4 months after infusion. Male patients should refrain from donating sperm, be abstinent or use a male condom for up to 6 months after receiving BEQVEZ *[see Clinical Pharmacology (12.3)].*

8.4 Pediatric Use

The safety and efficacy of BEQVEZ in pediatric patients have not been established.

8.5 Geriatric Use

The clinical study did not have any patient ≥65 years of age. The safety and efficacy of BEQVEZ have not been established in geriatric patients.

8.6 Hepatic Impairment

BEQVEZ has not been studied in patients with hepatic impairment.

8.7 Renal Impairment

BEQVEZ has not been studied in patients with renal impairment.

8.8 Human Immunodeficiency Virus (HIV) Positive Patients

Clinical studies of BEQVEZ included a limited number of HIV patients, which precludes a determination of whether the efficacy and safety data differ when compared to patients

without HIV infection.

8.9 Factor IX Inhibitors

The safety and effectiveness of BEQVEZ in patients with prior or active factor IX inhibitors have not been established *[see Clinical Pharmacology (12.6)]*. Patients with history of or active factor IX inhibitors should not take BEQVEZ.

After administration of BEQVEZ, patients should be monitored for the development of factor IX inhibitors by appropriate clinical observations and laboratory tests *[see Warnings and Precautions (5.4)]*.

11 DESCRIPTION

BEQVEZ (fidanacogene elaparvovec-dzkt) is an adeno-associated virus (AAV)-based gene therapy for intravenous infusion. BEQVEZ is based on recombinant DNA technology that consists of a recombinant viral capsid (AAVRh74var) derived from a naturally occurring AAV serotype (Rh74) vector containing the human coagulation factor IX (FIX) transgene modified to a high-specific factor IX activity variant known as FIX-R338L. The AAVRh74var capsid is derived from the Rh74 AAV, which is not known to cause disease in humans.

Each BEQVEZ vial contains 1×10^{13} vector genomes (vg) per mL, and the excipients sodium chloride (10.5 mg/mL), sodium phosphate, monobasic, monohydrate (0.3 mg/mL), sodium phosphate, dibasic, heptahydrate (2.2 mg/mL), and Poloxamer 188 (0.01 mg/mL) in a 1 mL extractable volume. Each 1 mL of BEQVEZ injection contains less than 5 mg each of sodium and phosphorus.

BEQVEZ requires dilution prior to administration *[see Dosage and Administration (2.2)]*. BEQVEZ is packaged as a sterile suspension and contains no preservative.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

BEQVEZ (fidanacogene elaparvovec-dzkt) is a gene therapy designed to introduce in the transduced cells a functional copy of the factor IX gene encoding a high-activity FIX variant (FIX-R338L, hFIX Padua).

The AAVRh74var capsid is able to transduce hepatocytes, the natural site of factor IX synthesis. Single intravenous infusion of BEQVEZ results in cell transduction and increase in circulating factor IX activity in patients with hemophilia B.

12.2 Pharmacodynamics

BEQVEZ therapy results in continuous endogenous coagulation factor IX expression.

The pharmacodynamic effect of BEQVEZ was assessed by measuring circulating factor IX activity level following administration of 5×10^{11} vg/kg of BEQVEZ. Factor IX activity level over time obtained from clinical study 1 is presented in Table 4. At Month 15, 86% (30 out of 35) patients had FIX activity ≥5% based on one-stage SynthASil assay and

68% (23 out of 34) and 71% (25 out of 35) based on one-stage Actin-FSL assay and chromogenic assay, respectively. At Month 24, 82% (18 out of 22) patients had FIX activity ≥5% based on one-stage SynthASil assay, and 64% (14 out of 22) based on one-stage Actin-FSL assay and chromogenic assay.

Table 4. Clinical Study 1: Factor IX Activity Over Time by Assay

	One-Stage Assay (SynthASil Reagent)* **(N=45)**	**One-Stage Assay (Actin-FSL Reagent)†** **(N=45)**	**Chromogenic Assay (N=45)**
Week 4			
N	42	42	43
Mean (SD)	19 (7.5)	9 (4.4)	9 (4.5)
Median (min, max)	18 (4, 32)	9 (1, 22)	8 (2, 22)
Week 12			
N	44	43	44
Mean (SD)	28 (15.2)	14 (8.1)	14 (9.3)
Median (min, max)	26 (3, 69)	13 (2, 35)	12 (1, 36)
Month 6			
N	39	41	40
Mean (SD)	28 (21.3)	13 (11.1)	15 (13.0)
Median (min, max)	23 (2, 100)	10 (1, 55)	10 (1, 58)
Month 15			
N	35	34	35
Mean (SD)	27 (25.7)	13 (12.8)	16 (17.0)
Median (min, max)	23 (2, 119)	10 (2, 62)	10 (2, 74)
Month 24			
N	22	22	22
Mean (SD)	25 (22.6)	13 (11.9)	15 (18.8)
Median (min, max)	23 (2, 95)	9 (1, 47)	10 (1, 80)

Any samples taken within 7 days (14 days if extended half-life product is used) of exogenous FIX replacement therapy were not included in the analysis.
If a patient withdrew consent, dropped out early from the study or resumed FIX prophylaxis, then the assessments at the visits following withdrawal/dropout/resumption were imputed as 1.9%. Of the 6 participants needing imputation the following timepoints were imputed: Month 6 (1), Month 15 (5) and Month 24 (3).

* Silica-based one-stage assay
† Ellagic acid-based OSA

Up to 6 years of follow-up FIX activity data is available from patients receiving the recommended dose of 5×10^{11} vg/kg in clinical study 2 (NCT02484092/NCT03307980). FIX activity remained stable over time, with mean factor IX activity (one-stage assay with Actin-FSL reagent) at 27.9% at Month 15 (n=9), 24.9% at Month 24 (n=14), 21.5% at Month 48 (Year 4, n=11) and 21.5% at Month 72 (Year 6, n=5).

Specific Populations

There is a trend of higher mean FIX activity (Week 12 to Month 15) with age, higher BMI, as well as in White race. Patients ≥35 years old (n=17) had 1.9-fold higher mean FIX activity as compared to patients 18 to <35 years old (n=28). Patients with BMI ≥25 kg/m^2 (n=29) had 1.5-fold higher mean FIX activity as compared to patients with <25 kg/m^2 (n=16). Patients in White race group (n=29) had 1.6-fold higher mean FIX activity as compared to patients in Non-white race group (n=12).

12.3 Pharmacokinetics

Biodistribution (Within the Body) and Vector Shedding (Excretion/Secretion)

BEQVEZ vector DNA levels were measured and quantified in blood and various shedding matrices using a quantitative polymerase chain reaction (qPCR) assay. This assay is sensitive and specific to BEQVEZ vector DNA, but could also detect DNA fragments. Saliva, semen, and urine samples from a subset of patients in the clinical study 1 were further characterized by measuring encapsidated vector DNA by a modified assay.

Nonclinical Biodistribution

Biodistribution of BEQVEZ was evaluated approximately 92 days after intravenous administration in healthy male non-human primates (NHPs) at dose levels up to 5×10^{12} vg/kg. Vector DNA was detected in all tissues assessed, including the testes. The highest levels of vector DNA were detected in the liver, spleen, and inguinal lymph nodes.

Clinical Data

Vector shedding after infusion with BEQVEZ was assessed in 60 patients at multiple time points in clinical studies (clinical study 1 and clinical study 2). In clinical study 1 a subset of patients (n=17) provided optional samples at early timepoints (2, 24 and 72 hours post-infusion) to better define parameters such as maximum vector DNA level (C_{max}) and time to maximum vector DNA level (T_{max}). The maximum vector DNA concentrations were found in plasma followed by saliva, peripheral blood mononuclear cells (PBMC), semen and urine. The mean T_{max} was 1.2 days for plasma and saliva and 1.6 days for urine. The mean T_{max} was 3.8 days and 7.4 days for semen and PBMC, respectively. For pooled analysis of clinical data (N=60 patients), full clearance of vector DNA was defined as having 3 consecutive negative results (i.e., below quantification limit). Vector DNA fully cleared from plasma, saliva, and semen within a mean of 1 to 4 months after infusion and PBMC was the slowest fluid to full clearance within a mean of 12 months. In semen, the maximum observed time for vector DNA full clearance was 154 days. In urine, the peak vector DNA concentration was very low relative to plasma and declined to full clearance within a mean of 4 weeks after infusion.

12.6 Immunogenicity

The administration of BEQVEZ has the potential to generate immunity in the form of neutralizing antibodies against the vector capsid, the transgene (virus-derived factor IX) and as a cellular response against the transduced cells producing factor IX.

In clinical studies, all patients receiving treatment were required to screen negative for anti-AAVRh74var neutralizing antibodies and negative (<0.6 BU) for factor IX inhibitors in a Nijmegen modified Bethesda assay following a lifetime minimum of 50 exposure days to factor IX replacement therapy. No patients developed factor IX inhibitors during the clinical studies using BEQVEZ.

A sustained increase in neutralizing anti-AAVRh74var antibodies has been observed after administration of BEQVEZ in all patients who participated in clinical studies and had neutralizing antibody (nAb) assessment.

In clinical study 1, anti-AAVRh74var antibody titers were assessed annually following BEQVEZ administration. Mean (SD) titer at Week 52 was 101,230.98 (118,479.743) and at the last time point tested, Week 156, mean (SD) titer was 132,527.56 (121,891.612).

BEQVEZ-treated patients were tested for cellular immune responses to overall capsid pool and overall factor IX pool using an IFN-γ enzyme-linked immunosorbent spot (ELISpot) assay.

ELISpot results did not show a trend of presumed T-cell response (based on limited positive ELISpot) as a function of time during the 1-year post-infusion period in either clinical study 1 or clinical study 2.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenicity, mutagenicity, reproductive toxicity, and impairment of fertility studies have not been conducted with BEQVEZ. In a 2-year vector integration study in NHPs administered 5×10^{12} vg/kg, vector DNA was mostly detected in the form of episomal DNA that was not integrated into the host genome. The integration sites were generally random with a low frequency, and there was no indication of significant clonal expansion.

14 CLINICAL STUDIES

The efficacy of BEQVEZ was evaluated in clinical study 1 (NCT03861273) which is an ongoing, prospective, open-label, single-arm, multi-national study. The study enrolled 45 adult male patients with moderately severe to severe hemophilia B (factor IX activity ≤2 IU/dL). All patients completed a prospective lead-in study of at least six months for baseline data collection while they received routine factor IX prophylaxis in the usual care setting before entering clinical study 1. Enrolled patients then received a single intravenous infusion of BEQVEZ at a dose of 5×10^{11} vg/kg of body weight and entered a follow-up (FU) period of 6 years. Of the 45 patients, 41 completed at least 15 months of FU. The median FU of the 45 treated patients was 2.0 years (range: 0.4 to 3.2 years) from the time of infusion.

Only patients who were negative for pre-existing neutralizing antibodies to AAVRh74var capsid were eligible. Other key exclusion criteria included history of or current inhibitor to factor IX (≥0.6 Bethesda units), active hepatitis B or C infection, HIV infection with CD4 cell count ≤200 mm^3 or viral load >20 copies/mL, hypersensitivity to factor IX product, ALT/AST/ALP >2 times ULN, bilirubin >1.5 times ULN, unstable liver or biliary disease, and significant liver fibrosis.

Enrolled patients were 73% White, 16% Asian and 2.2% Black. The median age was 29 years (range: 18 to 62 years). A total of 13 (29%) and 15 (33%) patients had a history of hepatitis B and C, respectively. One (2%) patient was HIV positive.

The main efficacy outcome was a non-inferiority (NI) test of annualized bleeding rate (ABR) during the efficacy evaluation period (EEP), Week 12 (Day 82) to data cutoff following BEQVEZ treatment, compared with baseline ABR during the lead-in period. The ABR included treated and untreated bleeds, excluding procedural bleeds. The NI margin on the difference between the mean EEP ABR and the mean baseline ABR was 3.0 bleeds/year.

Table 5 summarizes the efficacy results. The model derived mean ABR was 4.5 bleeds/year (95% CI: 1.9, 7.2) during the baseline period and 2.5 bleeds/year (95% CI: 1.0, 3.9) during post-BEQVEZ EEP, resulting in a difference between the mean post-BEQVEZ EEP ABR and the baseline ABR of -2.1 bleeds/year (95% CI: -4.8, 0.7). The upper bound of the 95% CI in the difference was less than 3.0 bleeds/year, meeting the NI study success criterion. Six out of 45 patients (13%) resumed routine factor IX prophylaxis after BEQVEZ treatment, starting from 0.4 years to 1.7 years after BEQVEZ infusion. An additional patient had intermittent exogenous factor IX use and had a higher ABR post BEQVEZ (5.0 bleeds/year) compared to baseline (1.2 bleeds/year) with a factor IX activity <5% (SynthASil assay) starting at 0.4 years.

Table 5. Summary of Annualized Bleeding Rate and Bleeding Events (N=45)

	Baseline (Prospective Lead-in Period)	**Post-BEQVEZ Efficacy Evaluation Period***
Median (range) of follow-up time (years)	1.2 (0.6, 2.4)	1.8 (0.2, 3.0)
Total follow-up time (person-years)	59	83
Median (min, max) ABR (bleeds/year)†	1.3 (0.0, 53.9)‡	0.0 (0.0, 19.0)
Model derived mean ABR [bleeds/year] (95% CI)†§	4.5 (1.9, 7.2)	2.5 (1.0, 3.9)
n (%) of patients without any bleeds	13 (29%)	27 (60%)
Total number of observed bleeds	225	98
Number of observed spontaneous bleeds (proportion of total bleeds)	157 (70%)	60 (61%)
Number of observed joint bleeds (proportion of total bleeds)	184 (82%)	71 (72%)

ABR = Annualized Bleeding Rate for all bleeds (treated and untreated with factor IX, excluding procedural bleeds).

CI = confidence interval.

* Post-BEQVEZ efficacy evaluation period is from Week 12 (Day 82) to data cutoff.

† A total of 7 participants (16%) had used factor IX replacement products during the efficacy evaluation period for extended prophylaxis that confounded the treatment effect of BEQVEZ, with a median start time at 0.8 (range: 0.4 to 1.1) years. An ABR of 20 bleeds/year was imputed for the confounded periods.

‡ The results presented in this table included data on a participant with a baseline ABR of 53.9 bleeds/year, which disproportionately influenced the baseline ABR estimate. A post-hoc sensitivity analysis, excluding this participant, still met the non-inferiority study success criterion.

§ Model-based ABR estimates from a repeated measures generalized linear model with negative binomial distribution and identity link function.

16 HOW SUPPLIED/STORAGE AND HANDLING

16.1 How Supplied

BEQVEZ is supplied as a clear to slightly opalescent, colorless to slightly brown suspension with each mL containing 1×10^{13} vg.

BEQVEZ is shipped frozen (−100 °C to −60 °C [−148 °F to −76 °F]) in plastic vials with an elastomeric stopper and plastic snap fit cap with an extractable volume of 1 mL.

BEQVEZ is provided as a customized kit containing the number of vials (NDC 0069-0422-01) required to meet dosing requirements for each patient *[see Dosage and Administration (2.1)]*. The customized kit is accompanied with patient's specific identifier number (Pfizer Patient Identifier) on the outer carton.

The kit sizes and National Drug Codes (NDC) are provided in Table 6.

Table 6. BEQVEZ Multi-Vial Kits

Patient Dose Weight (kg)	Total Number of Vials per Kit	NDC Number
≤75	4	0069-2004-04
>75 to ≤95	5	0069-2005-05
>95 to ≤115	6	0069-2006-06
>115 to ≤135	7	0069-2007-07

16.2 Storage and Handling

BEQVEZ is shipped and delivered frozen between −100 °C to −60 °C (−148 °F to −76 °F) in clear vials.

Upon receipt, immediately place in a freezer between −90 °C to −60 °C (−130 °F to −76 °F).

Store in the original package to avoid direct sunlight and ultraviolet light exposure.

Store upright in the original package. If cartons or individual vials are tipped over or inverted during storage and handling, place the carton or individual vials back in the upright orientation immediately.

Frozen vials in the inner carton will take up to 1 hour to thaw at room temperature (up to 30 °C [86 °F]). Vials may be gently swirled but not shaken or inverted. The total time at room temperature between removing vials from frozen storage until the beginning of dose preparation should be no more than 3 hours. Once thawed, the medicinal product should not be re-frozen and may be stored refrigerated at 2 °C to 8 °C (36 °F to 46 °F) in the inner carton up to 24 hours.

Following dilution in 0.9% sodium chloride with 0.25% HSA, chemical and physical in-use stability has been demonstrated for 24 hours at 2 °C to 30 °C (36 °F to 86 °F).

17 PATIENT COUNSELING INFORMATION

Inform patients that:

- Pre-infusion blood tests will be necessary to look for factor IX inhibitors and detect

pre-existing antibodies to AAVRh74var. If these tests are positive the patient will not be a candidate for BEQVEZ *[see Dosage and Administration (2)]*.
- Adverse reactions may occur during and after infusion.
    - Inform patients that infusion reactions, including hypersensitivity reactions, may occur. Patients will be monitored during and for at least 3 hours after infusion *[see Warnings and Precautions (5.2)]*.
    - Educate patients on possible symptoms of infusion reactions during and after infusion and advise them to immediately inform medical staff if they experience such a reaction *[see Dosage and Administration (2.3) and Warnings and Precautions (5.2)]*.

- BEQVEZ can elevate certain liver enzymes. Baseline and periodic blood tests will be required to assess liver health and bleeding risk. Corticosteroid treatment may be necessary if this occurs, and patients should be encouraged to complete the course as prescribed *[see Warnings and Precautions (5.1)]*.
- It is important to maintain or improve hepatic health. Potential hepatotoxic medicinal substances, herbal supplements, and alcohol may reduce the efficacy of BEQVEZ, and the risk of serious hepatic reactions may increase following BEQVEZ administration *[see Drug Interactions (7)]*.
- If bleeding occurs following administration of BEQVEZ, then blood tests will be performed for factor IX activity and factor IX inhibitors *[see Dosage and Administration (2.3)]*.
- Tapering factor IX concentrates/hemostatic agents may be necessary. Counsel patients on whether and how to continue or restart their use, and on actions in case of invasive procedures, surgery, trauma, or bleeds *[see Dosage and Administration (2.3)]*.
- Not all patients may respond to BEQVEZ and that currently it is not possible to predict who will respond and how long the treatment response will continue. Counsel patients, as necessary, on when they may need to re-instate prophylactic use of factor IX concentrates/hemostatic agents *[see Dosage and Administration (2.3)]*.
- Vector distribution in blood (within the body), and vector shedding in semen and other excreta and secreta occurs post-infusion. Patients should not donate blood, organs, tissues, or cells for transplantation *[see Clinical Pharmacology (12.3)]*.
- Male patients refrain from donating sperm, be abstinent or use a male condom for up to 6 months after receiving BEQVEZ *[see Use in Specific Populations (8.3)]*.
- Temporary vector shedding of intravenously administered AAV-based gene therapies occurs primarily through urine and feces, and to some extent saliva, mucus, and semen. Advise patients and/or their caregivers on the proper handling of any materials that have come into contact with patient bodily waste or fluids; recommended procedures include storage of waste material in sealed bags prior to disposal into regular trash. Provide instructions to patients and/or their caregivers regarding proper hand hygiene when coming into direct contact with patient secretions or excretions. These precautions should be followed for 6 months after BEQVEZ infusion *[see Use in Specific Populations (8.3) and Clinical Pharmacology (12.3)].*
- Adjustments to their vaccination schedule may be necessary during corticosteroid use. Inform patients where feasible, if corticosteroid use is needed, their vaccination schedule should be adjusted appropriately.

- BEQVEZ is a liver-directed AAV therapy, there may be a theoretical risk of hepatocellular carcinoma. Patients with risk factors of hepatocellular carcinoma should be monitored for 5 years with regular ultrasound and blood tests. No malignancies were observed to date in the BEQVEZ clinical studies. Since the vector can insert into DNA of any cell, other malignancies may also occur *[see Warnings and Precautions (5.3)]*.
- They should be enrolled in a 15-year registry to evaluate the long-term efficacy and safety of hemophilia treatments.

This product's labeling may have been updated. For the most recent prescribing information, please visit www.pfizer.com.

For medical information about BEQVEZ, please visit www.pfizermedinfo.com or call 1-800-438-1985.

Manufactured by
Pfizer Inc.
New York, NY 10001
US License No. 2001

LAB-1513-1.0

PRINCIPAL DISPLAY PANEL – 1 mL Vial Label – NDC 0069-0422-01

NDC 0069-0422-01
Rx only

fidanacogene
elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vg/mL

Injection for Intravenous Use Only

Single-dose
Contains no preservative.
Discard unused portion

DO NOT SHAKE.
DO NOT REFREEZE.

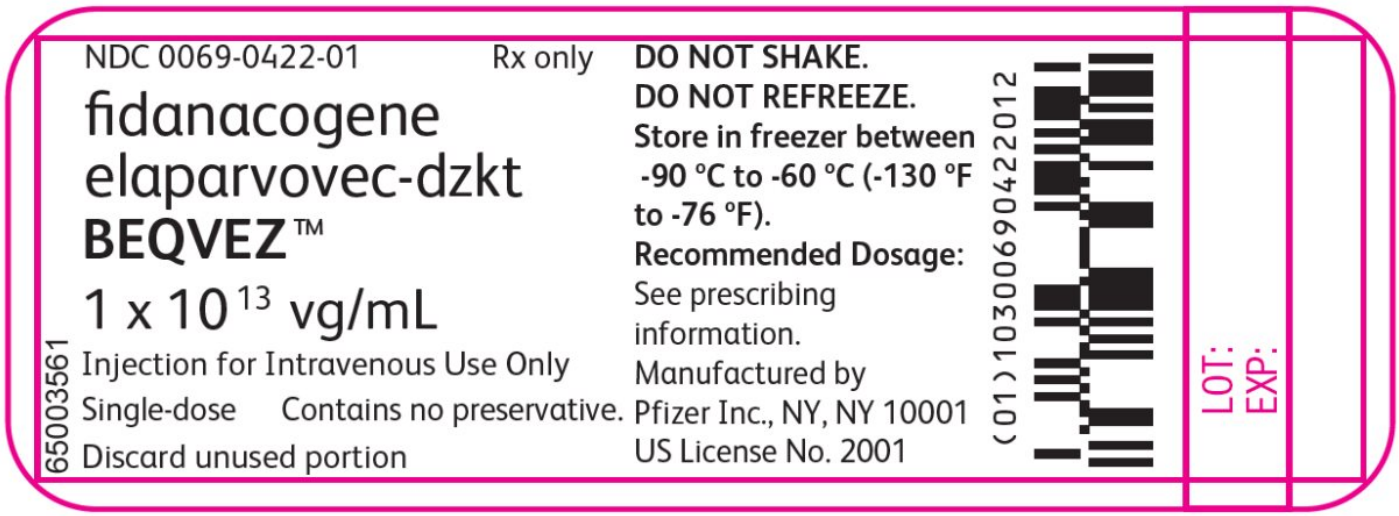
Store in freezer between

-90 °C to -60 °C (-130 °F to -76 °F).

Recommended Dosage: See prescribing information.

Manufactured by
Pfizer Inc., NY, NY 10001

US License No. 2001



PRINCIPAL DISPLAY PANEL – Intermediate Carton

Pfizer

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only
Single-dose vials
NOT FOR INDIVIDUAL RESALE
Rx only

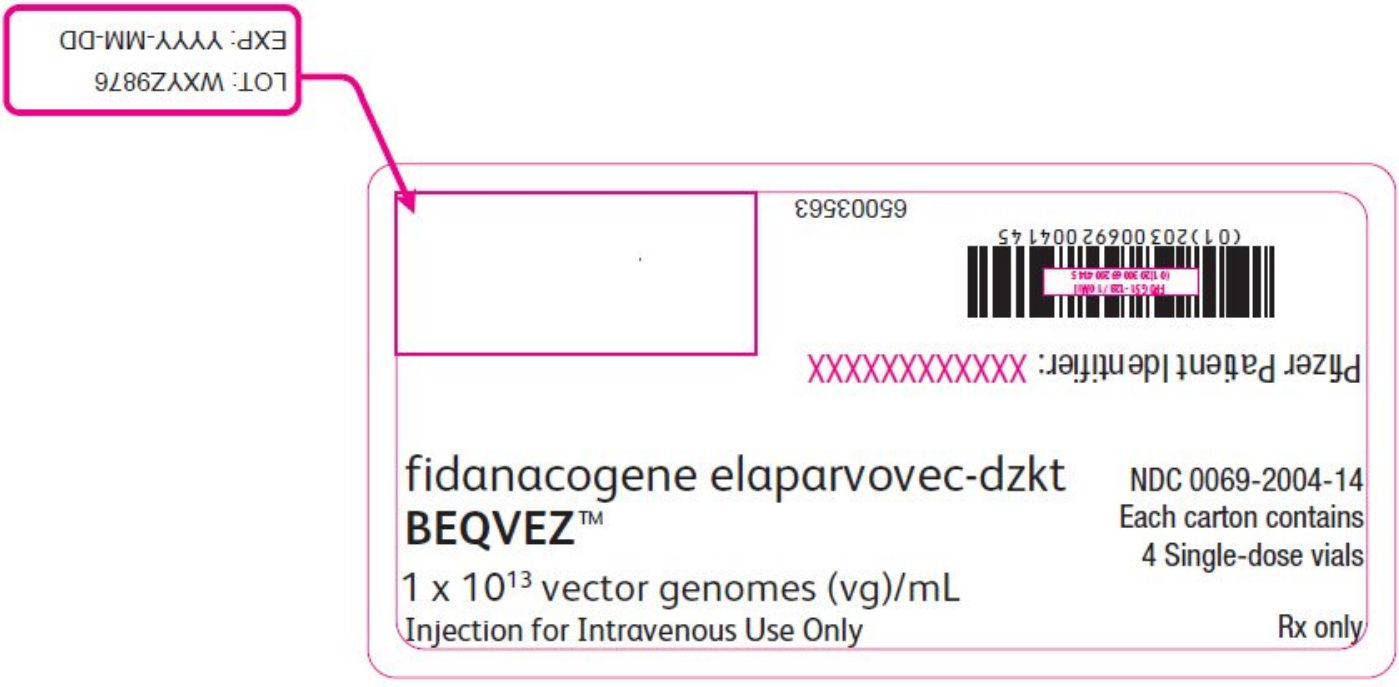
PRINCIPAL DISPLAY PANEL – Intermediate Carton Sticker – 4 single dose vials

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

NDC 0069-2004-14
Each carton contains
4 Single-dose vials

Rx only



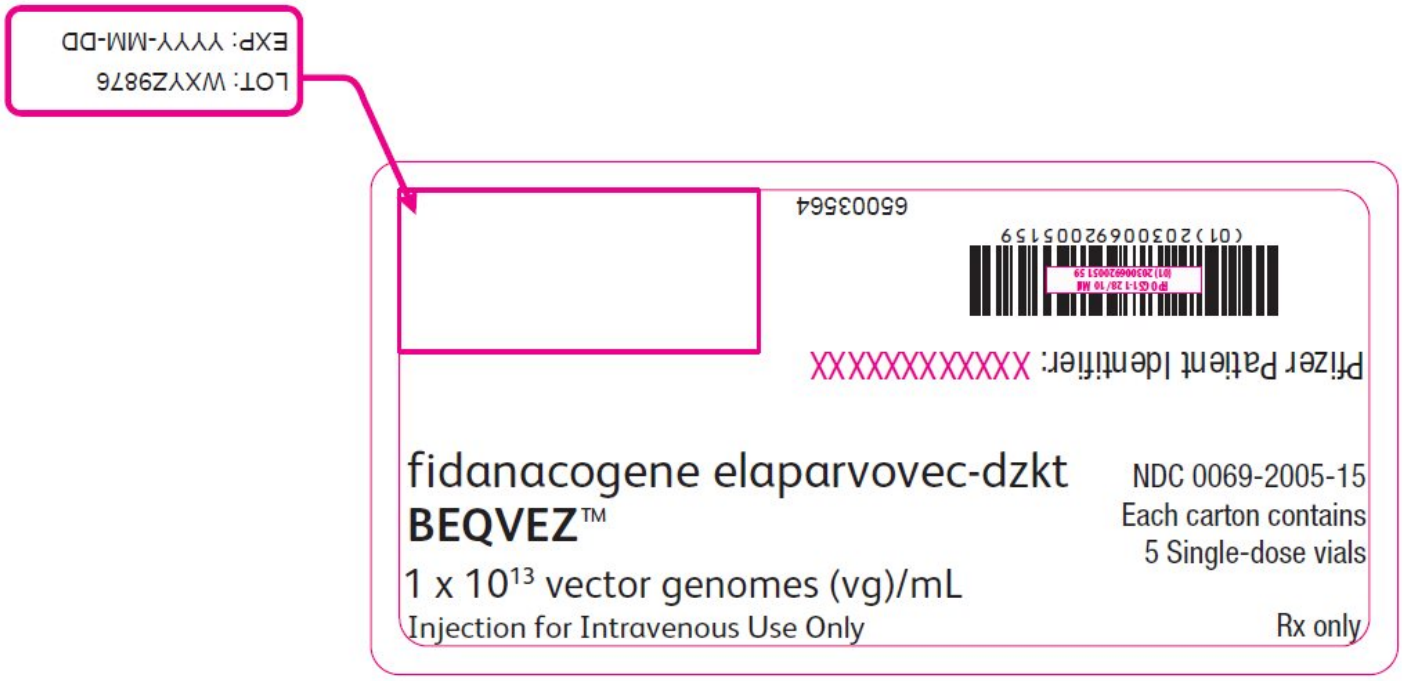
PRINCIPAL DISPLAY PANEL – Intermediate Carton Sticker – 5 single dose vials

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

NDC 0069-2005-15
Each carton contains
5 Single-dose vials

Rx only



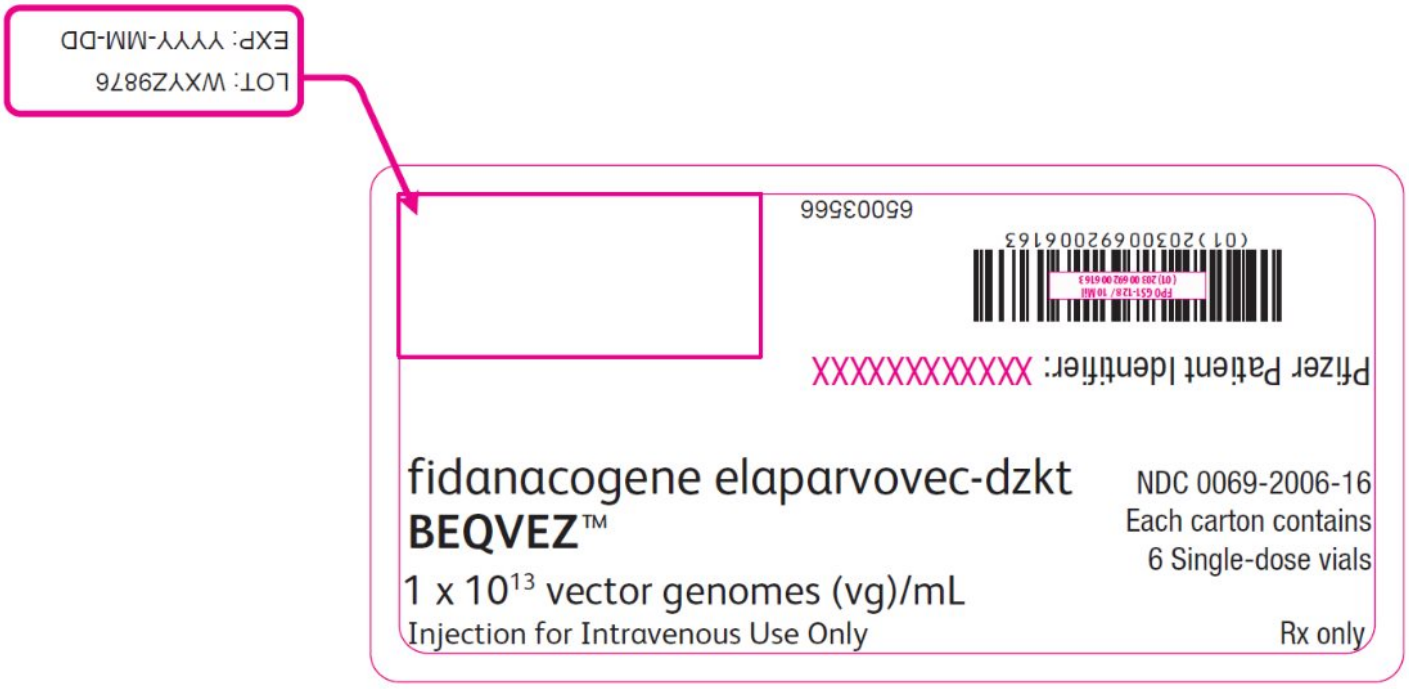
PRINCIPAL DISPLAY PANEL – Intermediate Carton Sticker – 6 single dose vials

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

NDC 0069-2006-16
Each carton contains
6 Single-dose vials

Rx only



PRINCIPAL DISPLAY PANEL – Intermediate Carton Sticker – 7 single dose vials

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

NDC 0069-2007-17
Each carton contains
7 Single-dose vials

Rx only

PRINCIPAL DISPLAY PANEL – Outer Carton

Pfizer

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only
Single-dose vials
Rx only

PRINCIPAL DISPLAY PANEL – Outer Carton Sticker – NDC 0069-2004-04

NDC 0069-2004-04
(Contains 1 carton of 4 Single-dose vials)

fidanacogene elaparvovec-dzkt
BEQVEZ™

1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

STORAGE: BEQVEZ™ is shipped and delivered frozen between -100 °C to -60 °C (-148 °F to -76 °F).
Upon receipt, immediately place in a freezer between -90 °C to -60 °C (-130 °F to -76 °F).

PFIZER PATIENT IDENTIFIER:
USGXNNNNNNNN

RX ONLY

Pfizer
30011885

Manufactured by
Pfizer Inc.
New York, NY 10001
US License No. 2001
Distributed by
Pfizer Labs
Division of Pfizer Inc.
New York, NY 10001

NDC 0069-2004-04
(Contains 1 carton of 4 Single-dose vials)

PFIZER PATIENT IDENTIFIER:
USGXNNNNNNNN

fidanacogene elaparvovec-dzkt

BEQVEZ™

1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

STORAGE: BEQVEZ™ is shipped and delivered frozen between -100 °C to -60 °C (-148 °F to -76 °F).
Upon receipt, immediately place in a freezer between -90 °C to -60 °C (-130 °F to -76 °F).

RX ONLY

Pfizer
30011885

Manufactured by
Pfizer Inc.
New York, NY 10001
US License No. 2001
Distributed by
Pfizer Labs
Division of Pfizer Inc.
New York, NY 10001

EXP: YYYY-MM-DD LOT:NNNNNNNNNN QTY: 1

(17) YYMMDD (10) NNNNNNNNNN (30) 01

(01) 00300692004042 (21) NNNNNNNNNNN

NNNNN

PRINCIPAL DISPLAY PANEL – Outer Carton Sticker – NDC 0069-2005-05

NDC 0069-2005-05
(Contains 1 carton of 5 Single-dose vials)

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

STORAGE: BEQVEZ™ is shipped and delivered frozen between
-100 °C to -60 °C (-148 °F to -76 °F).
Upon receipt, immediately place in a freezer between -90 °C to -60 °C
(-130 °F to -76 °F).

PFIZER PATIENT IDENTIFIER:
USGXNNNNNNNN

RX ONLY

Pfizer
30011886

Manufactured by
Pfizer Inc.
New York, NY 10001
US License No. 2001
Distributed by
Pfizer Labs
Division of Pfizer Inc.
New York, NY 10001

PRINCIPAL DISPLAY PANEL – Outer Carton Sticker – NDC 0069-2006-06

NDC 0069-2006-06
(Contains 1 carton of 6 Single-dose vials)

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

STORAGE: BEQVEZ™ is shipped and delivered frozen between
-100 °C to -60 °C (-148 °F to -76 °F).
Upon receipt, immediately place in a freezer between -90 °C to -60 °C
(-130 °F to -76 °F).

PFIZER PATIENT IDENTIFIER:
USGXNNNNNNNN

RX ONLY

Pfizer
30011887

Manufactured by
Pfizer Inc.
New York, NY 10001
US License No. 2001
Distributed by

Pfizer Labs
Division of Pfizer Inc.
New York, NY 10001

PRINCIPAL DISPLAY PANEL – Outer Carton Sticker – NDC 0069-2007-07

NDC 0069-2007-07
(Contains 1 carton of 7 Single-dose vials)

fidanacogene elaparvovec-dzkt
BEQVEZ™
1 x 10^{13} vector genomes (vg)/mL

Injection for Intravenous Use Only

STORAGE: BEQVEZ™ is shipped and delivered frozen between
-100 °C to -60 °C (-148 °F to -76 °F).
Upon receipt, immediately place in a freezer between -90 °C to -60 °C
(-130 °F to -76 °F).

PFIZER PATIENT IDENTIFIER:
USGXNNNNNNNN

RX ONLY

Pfizer
30011888

Manufactured by
Pfizer Inc.
New York, NY 10001
US License No. 2001
Distributed by
Pfizer Labs
Division of Pfizer Inc.
New York, NY 10001

BEQVEZ

fidanacogene elaparvovec-dzkt kit

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:0069-2004

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0069-2004-04	1 in 1 CARTON	05/02/2024	
1	NDC:0069-2004-14	1 in 1 CARTON; Type 0: Not a Combination Product		

Quantity of Parts		
Part #	**Package Quantity**	**Total Product Quantity**
Part 1	4 VIAL, SINGLE-DOSE	4 mL

Part 1 of 1

BEQVEZ

fidanacogene elaparvovec-dzkt injection, suspension

Product Information	
Item Code (Source)	NDC:0069-0422
Route of Administration	INTRAVENOUS

Active Ingredient/Active Moiety		
Ingredient Name	**Basis of Strength**	**Strength**
FIDANACOGENE ELAPARVOVEC (UNII: 413EU9081Y) (FIDANACOGENE ELAPARVOVEC - UNII:413EU9081Y)	FIDANACOGENE ELAPARVOVEC	10000000000000 {GC} in 1 mL

Inactive Ingredients	
Ingredient Name	**Strength**
SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE (UNII: 593YOG76RN)	0.3 mg in 1 mL
SODIUM PHOSPHATE, DIBASIC, HEPTAHYDRATE (UNII: 70WT22SF4B)	2.2 mg in 1 mL
SODIUM CHLORIDE (UNII: 451W47IQ8X)	10.5 mg in 1 mL
POLOXAMER 188 (UNII: LQA7B6G8JG)	0.01 mg in 1 mL
WATER (UNII: 059QF0KO0R)	

Packaging				
#	**Item Code**	**Package Description**	**Marketing Start Date**	**Marketing End Date**
1	NDC:0069-0422-01	1 mL in 1 VIAL, SINGLE-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

BEQVEZ

fidanacogene elaparvovec-dzkt kit

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:0069-2005

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0069-2005-05	1 in 1 CARTON	05/02/2024	
1	NDC:0069-2005-15	1 in 1 CARTON; Type 0: Not a Combination Product		

Quantity of Parts

Part #	Package Quantity	Total Product Quantity
Part 1	5 VIAL, SINGLE-DOSE	5 mL

Part 1 of 1

BEQVEZ

fidanacogene elaparvovec-dzkt injection, suspension

Product Information

Item Code (Source)	NDC:0069-0422
Route of Administration	INTRAVENOUS

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
FIDANACOGENE ELAPARVOVEC (UNII: 413EU9081Y) (FIDANACOGENE ELAPARVOVEC - UNII:413EU9081Y)	FIDANACOGENE ELAPARVOVEC	10000000000000 {GC} in 1 mL

Inactive Ingredients

Ingredient Name	Strength

SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE (UNII: 593YOG76RN)	0.3 mg in 1 mL
SODIUM PHOSPHATE, DIBASIC, HEPTAHYDRATE (UNII: 70WT22SF4B)	2.2 mg in 1 mL
SODIUM CHLORIDE (UNII: 451W47IQ8X)	10.5 mg in 1 mL
POLOXAMER 188 (UNII: LQA7B6G8JG)	0.01 mg in 1 mL
WATER (UNII: 059QF0KO0R)	

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0069-0422-01	1 mL in 1 VIAL, SINGLE-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

BEQVEZ

fidanacogene elaparvovec-dzkt kit

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:0069-2006

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0069-2006-06	1 in 1 CARTON	05/02/2024	
1	NDC:0069-2006-16	1 in 1 CARTON; Type 0: Not a Combination Product		

Quantity of Parts

Part #	Package Quantity	Total Product Quantity
Part 1	6 VIAL, SINGLE-DOSE	6 mL

Part 1 of 1

BEQVEZ

fidanacogene elaparvovec-dzkt injection, suspension

Product Information	
Item Code (Source)	NDC:0069-0422
Route of Administration	INTRAVENOUS

Active Ingredient/Active Moiety		
Ingredient Name	**Basis of Strength**	**Strength**
FIDANACOGENE ELAPARVOVEC (UNII: 413EU9081Y) (FIDANACOGENE ELAPARVOVEC - UNII:413EU9081Y)	FIDANACOGENE ELAPARVOVEC	10000000000000 {GC} in 1 mL

Inactive Ingredients	
Ingredient Name	**Strength**
SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE (UNII: 593YOG76RN)	0.3 mg in 1 mL
SODIUM PHOSPHATE, DIBASIC, HEPTAHYDRATE (UNII: 70WT22SF4B)	2.2 mg in 1 mL
SODIUM CHLORIDE (UNII: 451W47IQ8X)	10.5 mg in 1 mL
POLOXAMER 188 (UNII: LQA7B6G8JG)	0.01 mg in 1 mL
WATER (UNII: 059QF0KO0R)	

Packaging				
#	**Item Code**	**Package Description**	**Marketing Start Date**	**Marketing End Date**
1	NDC:0069-0422-01	1 mL in 1 VIAL, SINGLE-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

BEQVEZ

fidanacogene elaparvovec-dzkt kit

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:0069-2007

Packaging				
#	**Item Code**	**Package Description**	**Marketing Start Date**	**Marketing End Date**
1	NDC:0069-2007-07	1 in 1 CARTON	05/02/2024	
1	NDC:0069-2007-17	1 in 1 CARTON; Type 0: Not a Combination Product		

Quantity of Parts		
Part #	**Package Quantity**	**Total Product Quantity**
Part 1	7 VIAL, SINGLE-DOSE	7 mL

Part 1 of 1

BEQVEZ

fidanacogene elaparvovec-dzkt injection, suspension

Product Information	
Item Code (Source)	NDC:0069-0422
Route of Administration	INTRAVENOUS

Active Ingredient/Active Moiety		
Ingredient Name	**Basis of Strength**	**Strength**
FIDANACOGENE ELAPARVOVEC (UNII: 413EU9081Y) (FIDANACOGENE ELAPARVOVEC - UNII:413EU9081Y)	FIDANACOGENE ELAPARVOVEC	10000000000000 {GC} in 1 mL

Inactive Ingredients	
Ingredient Name	**Strength**
SODIUM PHOSPHATE, MONOBASIC, MONOHYDRATE (UNII: 593YOG76RN)	0.3 mg in 1 mL
SODIUM PHOSPHATE, DIBASIC, HEPTAHYDRATE (UNII: 70WT22SF4B)	2.2 mg in 1 mL
SODIUM CHLORIDE (UNII: 451W47IQ8X)	10.5 mg in 1 mL
POLOXAMER 188 (UNII: LQA7B6G8JG)	0.01 mg in 1 mL
WATER (UNII: 059QF0KO0R)	

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0069-0422-01	1 mL in 1 VIAL, SINGLE-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
BLA	BLA125786	05/02/2024	

Labeler - Pfizer Laboratories Div Pfizer Inc (134489525)

Establishment

Name	Address	ID/FEI	Business Operations
Wyeth Pharmaceutical Division of Wyeth Holdings LLC		883534067	API MANUFACTURE(0069-2004, 0069-2005, 0069-2006, 0069-2007) , ANALYSIS(0069-2004, 0069-2005, 0069-2006, 0069-2007)

Establishment

Name	Address	ID/FEI	Business Operations
Pfizer Inc		004954111	API MANUFACTURE(0069-2004, 0069-2005, 0069-2006, 0069-2007)

Establishment

Name	Address	ID/FEI	Business Operations
Wyeth Farma SA		462005232	ANALYSIS(0069-2004, 0069-2005, 0069-2006, 0069-2007) , PACK(0069-2004, 0069-2005, 0069-2006, 0069-2007) , LABEL(0069-2004, 0069-2005, 0069-2006, 0069-2007)

Revised: 5/2024 Pfizer Laboratories Div Pfizer Inc