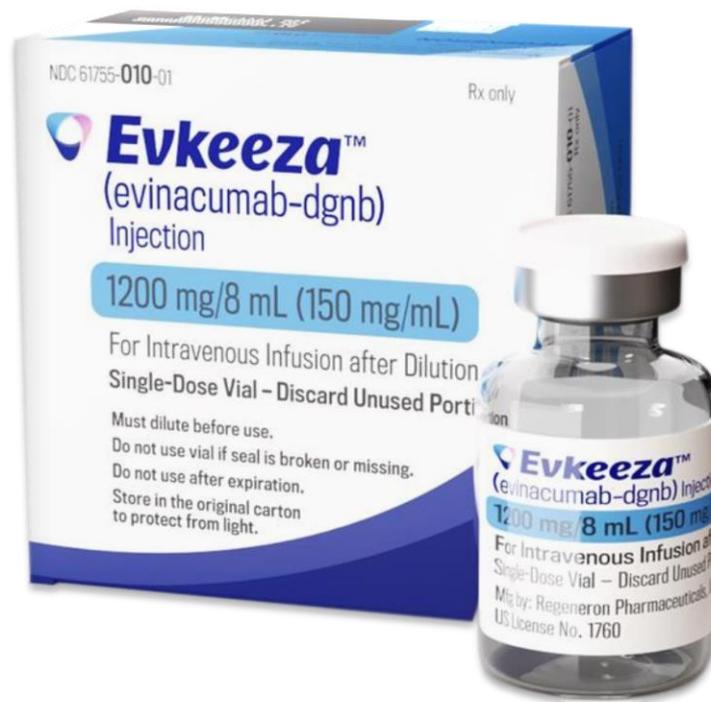


Evkeeza (evinacumab-dgnb)



NEW PRODUCT SLIDESHOW

MPR

Introduction

- **Brand name:** Evkeeza
- **Generic name:** Evinacumab-dgnb
- **Pharmacologic class:** Angiotensin-like 3 (ANGPTL3) inhibitor
- **Strength and Formulation:** 150mg/mL; soln for IV infusion after dilution; preservative-free
- **Manufacturer:** Regeneron Pharmaceuticals
- **How supplied:** Single-dose vials (2.3mL, 8mL)—1
- **Legal Classification:** Rx

Evkeeza



Indication

- Adjunct to other low-density lipoprotein-cholesterol (LDL-C) lowering therapies for the treatment of adult and pediatric patients, aged 12 years and older, with **homozygous familial hypercholesterolemia (HoFH)**.

Limitations of Use

- The safety and effectiveness of Evkeeza have not been established in patients with other causes of hypercholesterolemia, including those with heterozygous familial hypercholesterolemia (HeFH).
- The effects of Evkeeza on cardiovascular morbidity and mortality have not been determined.

Dosage and Administration

- Administer diluted solution by intravenous (IV) infusion over 60 minutes.
- Rate of infusion may be slowed, interrupted or discontinued if patient develops adverse reactions, including infusion or hypersensitivity reactions.
- ≥ 12 years: **15mg/kg once monthly** (every 4 weeks).
- Assess LDL-C when clinically appropriate, may be measured as early as 2 weeks after initiation.
- May be administered without regard to timing of lipoprotein apheresis.

Considerations for Specific Populations

- **Pregnancy:** may cause fetal harm based on data from animal reproduction studies; available human data are insufficient to assess for drug-associated risk.
 - *Pregnancy exposure registry:* (833) 385-3392.
- **Nursing mothers:** No data on presence of evinacumab-dgnb in human or animal milk; consider benefits of breastfeeding along with mother's clinical need for Evkeeza and any potential adverse effects.
- **Pediatric:** <12 years: not established.
- **Geriatrics:** Clinical studies did not include sufficient numbers to determine difference from younger adult patients.

Contraindications

- Patients with a history of serious hypersensitivity reaction to evinacumab-dgnb or to any of the excipients in Evkeeza.

Warnings and Precautions

- Discontinue if signs or symptoms of serious **hypersensitivity reactions** occur.
 - Treat appropriately according to standard of care, and monitor until signs and symptoms resolve.
- **Embryo-fetal toxicity:** may cause fetal harm.
 - Consider obtaining a pregnancy test prior to initiation.
 - Advise patients who may become pregnant to use effective contraception during treatment and for at least 5 months after the last dose.

Adverse Reactions

- **Most common ($\geq 5\%$):** Nasopharyngitis, influenza-like illness, dizziness, rhinorrhea, nausea.
- **Others:** Serious hypersensitivity reactions.

Mechanism of Action

- **Evinacumab-dgnb** is a recombinant human monoclonal antibody that binds to and inhibits ANGPTL3, a member of the angiopoietin-like protein family that is expressed primarily in the liver and plays a role in the regulation of lipid metabolism by inhibiting lipoprotein lipase and endothelial lipase.
- This leads to reduction in LDL-C, high density lipoprotein cholesterol (HDL-C), and triglycerides (TG).

Mechanism of Action

- Evinacumab-dgnb reduces LDL-C independent of the presence of LDL receptor by promoting very low-density lipoprotein (VLDL) processing and clearance upstream of LDL formation.
- The blockade of ANGPTL3 lowers TG and HDL-C by rescuing lipoprotein lipase and endothelial lipase activities, respectively.

Clinical Trials

- Approval was based on the multicenter, double-blind, randomized, placebo-controlled ELIPSE-HoFH trial (ClinicalTrials.gov: NCT03399786) that evaluated the efficacy and safety of Evkeeza in 65 patients with HoFH.
- During the 24-week, double-blind treatment period, patients were randomly assigned 2:1 to receive either Evkeeza 15mg/kg IV every 4 weeks (n=43) or placebo (n=22).
- After the treatment period, 64 patients entered a 24-week open-label extension period in which all patients received Evkeeza 15mg/kg IV every 4 weeks.
- The **primary efficacy endpoint** was percent change in LDL-C from baseline to week 24.

Clinical Trials

■ Patient demographics

- Patients were on the following lipid-lowering therapies: statins (94%), ezetimibe (75%), PCSK9 inhibitor antibodies (77%), lomitapide (22%), and lipoprotein apheresis (34%).
- Mean LDL-C at baseline: 255mg/dL.
- Mean age at baseline: 42 years (range: 12 to 75); 12% were ≥ 65 years.
- 54% Women; 3% Hispanic; 74% White; 15% Asian; 3% Black; 8% other or not reported.

Clinical Trials

- Results showed that patients treated with Evkeeza had a 47% reduction in LDL-C compared with a 2% increase for patients who received placebo (least squares mean treatment difference: -49%; 95% CI, -65, -33; $P < .0001$).
- Statistically significant reductions for Evkeeza vs placebo, respectively ($P < .0001$ for all):
 - Apolipoprotein B: -41% vs -5%
 - Non-HDL-C: -50% vs +2%
 - Total Cholesterol: -47% vs +1%
 - Triglycerides: -55% vs -5%

Clinical Trials

- At week 24, the observed reduction in LDL-C with Evkeeza was similar across predefined subgroups, including age, sex, limited LDLR activity, concomitant treatment with lipoprotein apheresis, and concomitant background lipid-lowering medications.
- After 24 weeks of open-label Evkeeza treatment (week 24 to week 48), the observed LDL-C reduction from baseline was similar in patients who crossed over from placebo to Evkeeza and was maintained in patients who remained on Evkeeza for 48 weeks.

Clinical Trials

- In ELIPSE-HoFH, 1 pediatric patient received Evkeeza 15mg/kg IV every 4 weeks and 1 pediatric patient received placebo, as an adjunct to other lipid-lowering therapies.
 - At week 24, the percent change in LDL-C was -73% with Evkeeza vs +60% with placebo.

Clinical Trials

- In an open-label extension study, 13 pediatric patients 12 to 17 years of age with HoFH received Evkeeza 15mg/kg IV every 4 weeks as an adjunct to other lipid-lowering therapies.
 - At week 24, the percent change in LDL-C was -52% in the 9 patients who completed treatment and had a lipid assessment.
 - Overall effect on lipid parameters was generally similar to that seen in adults.

New Product Monograph

- For more information view the product monograph available at:

<https://www.empr.com/drug/evkeeza/>