FRESENIUS KABI

caring for life

Gadobutrol Injection

First-to-Market Generic of Gadavist®.* Providing a cost-effective MR contrast option to providers that's fully substitutable to the brand.

WARNING: NEPHROGENIC SYSTEMIC FIBROSIS (NSF)

Gadolinium-based contrast agents (GBCAs) increase the risk for NSF among patients with impaired elimination of the drugs. Avoid use of GBCAs in these patients unless the diagnostic information is essential and not available with non-contrasted MRI or other modalities. NSF may result in fatal or debilitating fibrosis affecting the skin, muscle and internal organs.

- **The risk for NSF appears highest among patients with:**
  - **Chronic, severe kidney disease (GFR < 30 mL/min/1.73 m^2), or**
  - **Acute kidney injury.**
- **Screen patients for acute kidney injury and other conditions that may reduce renal function. For patients at risk for chronically reduced renal function (for example, age > 60 years, hypertension or diabetes), estimate the glomerular filtration rate (GFR) through laboratory testing.**
- **For patients at highest risk for NSF, do not exceed the recommended gadobutrol injection dose and allow a sufficient period of time for elimination of the drug from the body prior to any re-administration.**

Please see Important Safety Information on the following pages.

Gadobutrol Injection

Gadolinium-Based Contrast Agent

High Relaxivity, Macrocyclic Bond, High Concentration GBCA[1,2]

Fresenius Kabi's Gadobutrol Injection provides you with an option that is chemically equivalent and fully substitutable to Gadavist®.* **Now you have a choice.**

Gadobutrol injection is a gadolinium-based contrast agent indicated for use with magnetic resonance imaging (MRI):[1,2]

- To detect and visualize areas with disrupted blood brain barrier and/or abnormal vascularity of the central nervous system in adult and pediatric patients, including term neonates
- To assess the presence and extent of malignant breast disease in adult patients
- To evaluate known or suspected supra-aortic or renal artery disease in adult and pediatric patients, including term neonates
- To assess myocardial perfusion (stress, rest) and late gadolinium enhancement in adult patients with known or suspected coronary artery disease (CAD)

Gadobutrol is a high relaxivity macrocyclic agent. Signal enhancement is dependent on multiple factors including concentration and relaxivity. High relaxivity may help improve tissue visualization.[1,2]

A Cost-Effective Option from an Experienced, Reliable Supplier

Committed to Helping You

Our commitment is to provide you with choice and value — by continuing to grow our portfolio of cost-effective, high-quality generic contrast agents.

Fresenius Kabi is a global healthcare company that specializes in lifesaving medicines and technologies for infusion, transfusion and clinical nutrition – with a comprehensive portfolio of injectable drugs and delivery systems used to treat a broad spectrum of patients. As a leading provider of generic medications, we leverage our 100-year history to deliver innovative therapies that are safe, effective and affordable. **That's how Fresenius Kabi brings confidence within reach.**

Sources:
1. Gadobutrol Injection Package Insert, January 2023
2. Gadobutrol Injection Imaging Bulk Package Insert, June 2023

IMPORTANT SAFETY INFORMATION

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INDICATIONS AND USAGE

Gadobutrol Injection is a gadolinium-based contrast agent indicated for use with magnetic resonance imaging (MRI):

- To detect and visualize areas with disrupted blood brain barrier and/or abnormal vascularity of the central nervous system in adult and pediatric patients, including term neonates.
- To assess the presence and extent of malignant breast disease in adult patients.
- To evaluate known or suspected supra-aortic or renal artery disease in adult and pediatric patients, including term neonates.
- To assess myocardial perfusion (stress, rest) and late gadolinium enhancement in adult patients with known or suspected coronary artery disease (CAD).

Contraindications: Gadobutrol Injection is contraindicated in patients with history of severe hypersensitivity reaction to Gadobutrol Injection.

Hypersensitivity Reactions: Anaphylactic and other hypersensitivity reactions with cardiovascular, respiratory, or cutaneous manifestations, ranging from mild to severe, including death, have uncommonly occurred following Gadobutrol Injection administration. Before Gadobutrol Injection administration, assess all patients for any history of a reaction to contrast media, bronchial asthma and/or allergic disorders. These patients may have an increased risk for a hypersensitivity reaction to Gadobutrol Injection. Administer Gadobutrol Injection only in situations where trained personnel and therapies are promptly available for the treatment of hypersensitivity reactions, including personnel trained in resuscitation.

Fresenius Kabi's Gadobutrol Injection is fully substitutable and chemically equivalent to Gadavist®.*

	Reference Listed Drug						Approved AP Generic						Therapeutically Equivalent
Name	**Gadavist®[1,2]**						**Gadobutrol Injection[3,4]**						
Indication	Gadavist is a gadolinium-based contrast agent indicated for use with magnetic resonance imaging (MRI): • To detect and visualize areas with disrupted blood brain barrier and/or abnormal vascularity of the central nervous system in adult and pediatric patients, including term neonates • To assess the presence and extent of malignant breast disease in adult patients • To evaluate known or suspected supra-aortic or renal artery disease in adult and pediatric patients, including term neonates • To assess myocardial perfusion (stress, rest) and late gadolinium enhancement in adult patients with known or suspected coronary artery disease (CAD).						Gadobutrol Injection is a gadolinium-based contrast agent indicated for use with magnetic resonance imaging (MRI): • To detect and visualize areas with disrupted blood brain barrier and/or abnormal vascularity of the central nervous system in adult and pediatric patients, including term neonates • To assess the presence and extent of malignant breast disease in adult patients • To evaluate known or suspected supra-aortic or renal artery disease in adult and pediatric patients, including term neonates • To assess myocardial perfusion (stress, rest) and late gadolinium enhancement in adult patients with known or suspected coronary artery disease (CAD).						✓
Features	Sterile, clear and colorless to pale yellow solution.						Sterile, clear and colorless to pale yellow solution.						✓
Concentration	604.72 mg gadobutrol per mL (equivalent to 1 mmol gadobutrol per mL)						604.72 mg gadobutrol per mL (equivalent to 1 mmol gadobutrol per mL)						✓
Ingredients	**Active Ingredient:** gadobutrol **Inactive Ingredients:** calcobutrol sodium, trometamol, hydrochloric acid (for pH adjustment) and water for injection						**Active Ingredient:** gadobutrol **Inactive Ingredients:** calcobutrol sodium, trometamol, hydrochloric acid (for pH adjustment) and water for injection						✓
Description	Single-Dose Vials				Imaging Bulk Packages		Single-Dose Vials				Imaging Bulk Packages		✓
Fill Volume	2 mL	7.5 mL	10 mL	15 mL	30 mL	65 mL	2 mL	7.5 mL	10 mL	15 mL	30 mL	65 mL	✓
Storage	Store at 25ºC (77ºF); excursions permitted to 15º to 30ºC (59º to 86ºF) [see USP Controlled Room Temperature].						Store at 25ºC (77ºF); excursions permitted to 15º to 30ºC (59º to 86ºF) [see USP Controlled Room Temperature].						✓

Generic medicines are the same high quality as their brand-name versions.[5]

To learn more about generic drugs visit **www.FDA.gov/GenericDrugs**.

1. Gadavist Package Insert, April 2022
2. Gadavist Imaging Bulk Package Insert, April 2022
3. Gadobutrol Injection Package Insert, January 2023
4. Gadobutrol Injection Imaging Bulk Package Insert, June 2023
5. FDA, Generic Drug Facts Handout https://www.fda.gov/media/107601/download

Gadolinium Retention: Gadolinium is retained for months or years in brain, bone, and other organs. Linear GBCAs cause more retention than macrocyclic GBCAs. At equivalent doses, retention varies among the linear agents. Retention is lowest and similar among the macrocyclic GBCAs. Consequences of gadolinium retention in the brain have not been established, but they have been established in the skin and other organs in patients with impaired renal function. While clinical consequences of gadolinium retention have not been established in patients with normal renal function, certain patients might be at higher risk. These include patients requiring multiple lifetime doses, pregnant and pediatric patients, and patients with inflammatory conditions. Consider the retention characteristics of the agent and minimize repetitive GBCA studies, when possible.

Acute Kidney Injury: In patients with chronic renal impairment, acute kidney injury sometimes requiring dialysis has been observed with the use of GBCAs. Do not exceed the recommended dose; the risk of acute kidney injury may increase with higher than recommended doses.

Extravasation and Injection Site Reactions: Ensure catheter and venous patency before the injection of Gadobutrol Injection. Extravasation into tissues during Gadobutrol Injection administration may result in moderate irritation.

Overestimation of Extent of Malignant Disease in MRI of the Breast: Gadobutrol Injection MRI of the breast overestimated the histologically confirmed extent of malignancy in the diseased breast in up to 50% of the patients.

Low Sensitivity for Significant Arterial Stenosis: The performance of Gadobutrol Injection MRA for detecting arterial segments with significant stenosis (>50% renal, >70% supra-aortic) has not been shown to exceed 55%. Therefore, a negative MRA study alone should not be used to rule out significant stenosis.

Adverse Events: The most frequent (≥ 0.5%) adverse reactions associated with Gadobutrol Injection in clinical studies were headache (1.7%), nausea (1.2%) and dizziness (0.5%).

To report SUSPECTED ADVERSE REACTIONS, contact Fresenius Kabi USA, LLC at 1-800-551-7176, option 5, or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Pregnancy: GBCAs cross the placenta and result in fetal exposure and gadolinium retention. Because of the potential risks of gadolinium to the fetus, use Gadobutrol Injection only if imaging is essential during pregnancy and cannot be delayed.

This Important Safety Information does not include all the information needed to use Gadobutrol Injection safely and effectively. Please see single dose vial package insert and imaging bulk package insert for full prescribing information, including BOXED WARNING, for Gadobutrol Injection. Full prescribing information is also available at www.fresenius-kabi.com/us.

Gadobutrol Injection

- FDA-approved, AP Rated
- High Relaxivity[1,2]
- Macrocyclic Bond[1,2]
- High Concentration GBCA[1,2]
- Preservative Free[1,2]
- The container closure is not made with natural rubber latex
- Bioequivalent and fully substitutable to Gadavist®*

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Unit of Sale NDC	Description	Fill Volume (mL)	Unit of Sale
65219-281-02	Single-Dose Vial	2 mL	15
65219-281-07	Single-Dose Vial	7.5 mL	20
65219-281-10	Single-Dose Vial	10 mL	20
65219-281-15	Single-Dose Vial	15 mL	20
65219-287-30	Imaging Bulk Package	30 mL	10
65219-289-65	Imaging Bulk Package	65 mL	10

1. Gadobutrol Injection Package Insert, January 2023
2. Gadobutrol Injection Imaging Bulk Package Insert, June 2023
*Gadavist® is a registered trademark of Bayer.

Ordering Information

Please contact your account representative or our Customer Service Department Monday through Friday, 7:00AM – 6:00PM (CST) at:

Toll-Free: (888) 386-1300
Fax: (800) 743-7082
E-mail: customerservice.usa@fresenius-kabi.com
For more information visit: GenericContrastAgents.com

If you are interested in establishing a new account with Fresenius Kabi USA, contact us for additional information and necessary forms.

Please see single dose vial package insert and imaging bulk package insert for full prescribing information, including BOXED WARNING, for Gadobutrol Injection. Full prescribing information is also available at www.fresenius-kabi.com/us.

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