

Fresenius Kabi: Bringing *more* to those who matter *most*

Fresenius Kabi combines science and a commitment to patient care to offer **more options, more choices, and more variety**



A portfolio built on

INNOVATION

Fresenius Kabi is committed to supporting care across the continuum



Each milestone in Fresenius Kabi's parenteral nutrition (PN) history represents a lasting commitment to patients, clinicians, and the science of nutrition.

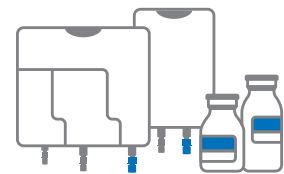
From our earliest lipid injectable emulsions (ILEs) to 3-chamber bag PN and intravenous (IV) solutions, every advancement builds on decades of expertise and collaboration. Together, these products form an expansive PN portfolio designed to bring **more choice and flexibility to care**.



PN bag products not made with DEHP or PVC



Responsibly sourced fish oil, certified by Friend of the Sea*

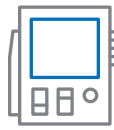


A broad range of IV solutions and PN additives



Pharmaceuticals

Injectable drugs and delivery systems used in oncology, anesthesia and analgesia, anti-infectives, and critical care—across a wide range of clinical environments.



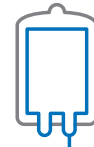
MedTech

Infusion systems, apheresis devices, and cell and gene therapy technologies that support care from donor-side to bedside.



Biopharma

Biosimilar medicines developed to expand access to important biologic therapies, supported by global research and manufacturing expertise.



IV therapy

IV solutions in **freeflex**® and **freeflex**®+ bags, not made with DEHP or PVC, along with infusion technologies and administration sets used throughout pharmacy and nursing workflows.

These solutions represent our ongoing commitment to clinicians and the patients they serve.

*Data on file 4/1/26.

The **first** and **only** 4-oil ILE¹



Omega-6

(30% soybean oil)

Provides essential fatty acids (EFAs)

Medium-chain triglycerides (MCT)

(30% MCT)

A source of rapidly available energy²

Omega-9

(25% olive oil)

Supplies monounsaturated fatty acids

Omega-3

(15% fish oil)

A source of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)³

ORDERING INFORMATION

NDC	63323-820-00	63323-820-74	63323-820-50	63323-820-10*
Bag Size	100 mL	250 mL	500 mL	1000 mL
Bags/Case	10	10	12	6

*Pharmacy Bulk Package.

Indication

SMOF^{lipid} is indicated in adult and pediatric patients, including term and preterm neonates, as a source of calories and essential fatty acids for parenteral nutrition when oral or enteral nutrition is not possible, insufficient, or contraindicated.

Contraindications

Known hypersensitivity to fish, egg, soybean, peanut or any of the active or inactive ingredients. Severe disorders of lipid metabolism characterized by hypertriglyceridemia (serum triglycerides >1,000 mg/dL).

SMOF^{lipid} is intended for **adults, children, and neonates** for **daily lipid dosing**¹

Daily lipids can be a part of PN regimens^{1,4,5}:

- Provide EFAs
- Serve as an alternative energy source to dextrose alone
- Provide calories without significant osmolarity contribution for peripheral PN
- May help minimize complications associated with excessive dextrose use, including:
 - Hepatic steatosis
 - Respiratory insufficiency
 - Metabolic stress
 - Hyperglycemia-induced compromised immune function
 - Fever

Dosing Considerations¹:

- Recommended dosage depends on age, energy expenditure, clinical status, body weight, tolerance, ability to metabolize and eliminate lipids, and consideration of additional energy given to the patient.
- Do not exceed the maximum infusion rate of 0.5 mL/kg/hour in adults.
- Do not exceed the maximum infusion rate of 0.75 mL/kg/hour in pediatric patients.

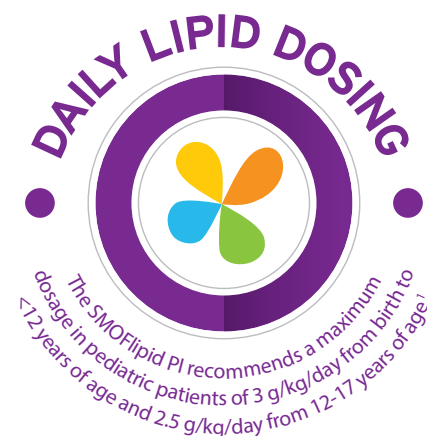
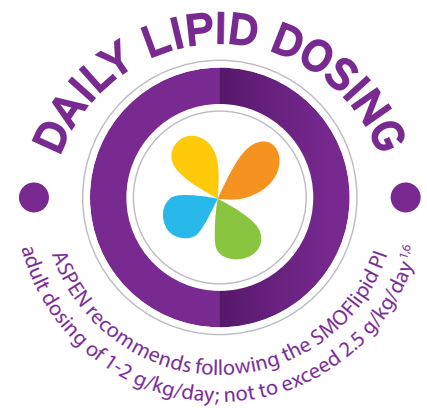
Warnings and Precautions

Clinical Decompensation with Rapid Infusion of Intravenous Lipid Emulsion in Neonates and Infants:

Acute respiratory distress, metabolic acidosis, and death after rapid infusion of intravenous lipid emulsions have been reported.¹

Parenteral Nutrition-Associated Liver Disease: Increased risk in patients who receive parenteral nutrition for greater than 2 weeks, especially preterm neonates. Monitor liver tests; if abnormalities occur, consider discontinuation or dosage reduction.¹

Please see Important Safety Information for SMOF^{lipid} on page 10 and full Prescribing Information at www.FreseniusKabiNutrition.com/SMOFlipidPI.



Omegaven®

(fish oil triglycerides) injectable emulsion, for intravenous use

The **first** and **only** 100% fish oil ILE for pediatric patients with PN-associated cholestasis (PNAC)⁷



Two open-label clinical trials (N=123) evaluated Omegaven in pediatric patients with PNAC receiving PN. Omegaven-treated patients (n=82) were pair-matched 2:1 with historical controls (n=41) who received a soybean oil-based intravenous lipid emulsion. Both studies were not designed to demonstrate noninferiority or superiority of Omegaven compared with the soybean oil-based comparator.⁷

Patients treated with Omegaven showed⁷:

- Age-appropriate growth
- Observed improvements in liver function parameters
 - In the safety analysis, 113 of 189 patients reached direct bilirubin (DBil) levels <2 mg/dL and aspartate transaminase (AST) or alanine transaminase (ALT) <3 times the upper limit of normal at the end of the study

ORDERING INFORMATION		
NDC	63323-205-50	63323-205-00
Bottle Size	50 mL	100 mL
Bottles/Case	10	10

Indication

Omegaven is indicated as a source of calories and fatty acids in pediatric patients with parenteral nutrition-associated cholestasis (PNAC).

Limitations of Use

Omegaven is not indicated for the prevention of PNAC. It has not been demonstrated that Omegaven prevents PNAC in parenteral nutrition (PN)-dependent patients. It has not been demonstrated that the clinical outcomes observed in patients treated with Omegaven are a result of the omega-6:omega-3 fatty acid ratio of the product.

Contraindications

Known hypersensitivity to fish or egg protein or to any of the active ingredients or excipients. Severe hemorrhagic disorders. Severe disorders of lipid metabolism characterized by hypertriglyceridemia (with serum triglycerides greater than 1,000 mg/dL).

Please see Important Safety Information for Omegaven on page 11 and full Prescribing Information at www.FreseniusKabiNutrition.com/OmegavenPI.

Intralipid®

20% (lipid injectable emulsion), for intravenous use

A well-established ILE⁸

Approved by the FDA for more than 40 years, Intralipid is a 100% soybean oil-based ILE that has been administered* in more than 200 million infusions* to patients of every age.⁸

Intralipid may be considered for patients requiring PN⁸:

- As a source of EFAs for prevention of essential fatty acid deficiency (EFAD)
- When other ILEs are not an option

*Data on file 4/1/26.



ORDERING INFORMATION					
NDC	65219-531-10	65219-533-25	65219-535-50	65219-539-10 [†]	65219-537-50 [†]
Bag Size/ Concentration	100 mL 20%	250 mL 20%	500 mL 20%	1000 mL 20%	500 mL 30%
Bags/Case	10	10	12	6	12

[†]SMOFIpid and Intralipid Pharmacy Bulk Package are only indicated for use in pharmacy admixture program for the preparation of three-in-one or total nutrition admixtures.⁸

Indication

Intralipid is indicated as a source of calories and essential fatty acids for adult and pediatric patients requiring parenteral nutrition (PN) and as a source of essential fatty acids for prevention of essential fatty acid deficiency (EFAD).

Intralipid Pharmacy Bulk Package is only indicated for use in pharmacy admixture program for the preparation of three-in-one or total nutrition admixtures (TNAs). Intralipid 30% Pharmacy Bulk Package is for admixing only and is **not** intended for direct intravenous infusion.

Contraindications

Known hypersensitivity to egg, soybean, or peanut, or any of the active ingredients or excipients. Severe disorders of lipid metabolism characterized by hypertriglyceridemia (serum triglyceride > 1,000 mg/dL).

Please see Important Safety Information for Intralipid on page 12 and full Prescribing Information at www.FreseniusKabiNutrition.com/Intralipid20PI and www.FreseniusKabiNutrition.com/Intralipid30PI.

Kabiven®
(amino acids, electrolytes, dextrose, and lipid injectable emulsion), for intravenous use

Perikabiven®
(amino acids, electrolytes, dextrose, and lipid injectable emulsion), for intravenous use

The first 3-chamber bags (3CBs) for adult PN^{9,10}



Two formulations designed to support flexibility in PN prescribing:

- Kabiven for central PN⁹
- Perikabiven for peripheral or central PN¹⁰
- 3CBs provide a full complement of electrolytes
- Eliminate the need to piggyback or add lipids
- Can be dispensed by the pharmacy as needed, including nights, weekends, and after compounding deadlines
- 24-month shelf life offers additional flexibility

ORDERING INFORMATION						
Kabiven (central PN)					Perikabiven (peripheral or central PN)	
NDC	63323-712-10	63323-712-15	63323-712-20	63323-712-25	63323-714-14	63323-714-19
Bag Size	1026 mL	1540 mL	2053 mL	2566 mL	1440 mL	1920 mL
Bags/Case	4	4	4	3	4	4

Indication

KABIVEN and PERIKABIVEN are each indicated as a source of calories, protein, electrolytes and essential fatty acids for adult patients requiring parenteral nutrition when oral or enteral nutrition is not possible, insufficient, or contraindicated. KABIVEN and PERIKABIVEN may be used to prevent essential fatty acid deficiency or treat negative nitrogen balance in adult patients.

Limitations of Use

Neither KABIVEN nor PERIKABIVEN is recommended for use in pediatric patients <2 years including preterm infants because the fixed content of the formulation does not meet nutritional requirements in this age group.

Contraindications

Concomitant treatment with ceftriaxone in neonates (28 days of age or younger). Known hypersensitivity to egg, soybean, peanut or any of the active or inactive ingredients. Severe disorders of lipid metabolism characterized by hypertriglyceridemia (with serum triglyceride concentration >1,000 mg/dL). Inborn errors of amino acid metabolism. Cardiopulmonary instability. Hemophagocytic syndrome.

Please see Important Safety Information for Kabiven and Perikabiven on page 13 and full Prescribing Information at www.FreseniusKabiNutrition.com/KabivenPI and www.FreseniusKabiNutrition.com/PerikabivenPI.

Electrolytes & Additives

Bringing **vital vials** to providers and their patients

Fresenius Kabi is the only manufacturer in the US that provides a complete portfolio of electrolyte and additive vials needed for PN compounding.*

*Data on file 4/1/26.

Electrolytes



Calcium Gluconate Injection, USP



Magnesium Sulfate Injection, USP 50%



Potassium Acetate Injection, USP



Potassium Chloride for Injection Concentrate, USP



Potassium Phosphates Injection, USP



Sodium Acetate Injection, USP



Sodium Chloride Injection, USP 14.6% (Concentrated)



Sodium Chloride Injection, USP 23.4% (Concentrated)



Sodium Phosphates Injection, USP

Vitamins



Ascorbic Acid Injection, USP



Cyanocobalamin Injection, USP+



Folic Acid Injection, USP



Pyridoxine Hydrochloride Injection, USP



Thiamine Hydrochloride Injection, USP

*Not for IV administration.

Trace Elements



Manganese Chloride Injection, USP



Zinc Sulfate Injection, USP



Scan the code to see Fresenius Kabi's portfolio of electrolytes & additives.

INDICATIONS AND USAGE

SMOFlipid is indicated in adult and pediatric patients, including term and preterm neonates, as a source of calories and essential fatty acids for parenteral nutrition (PN) when oral or enteral nutrition is not possible, insufficient, or contraindicated.

IMPORTANT SAFETY INFORMATION

For intravenous infusion only into a central or peripheral vein. Use a non-vented non-DEHP 1.2 micron in-line filter set during administration. Recommended dosage depends on age, energy expenditure, clinical status, body weight, tolerance, ability to metabolize and eliminate lipids, and consideration of additional energy given to the patient. The recommended dose for adults and pediatrics is shown in Table 1. For information on age-appropriate infusion rate, see the full prescribing information. SMOFlipid Pharmacy Bulk Package is only indicated for use in pharmacy admixture programs for the preparation of three-in-one or total nutrition admixtures. Protect the admixed PN solution from light.

Table 1: Recommended Adult and Pediatric Dosage

Age	Nutritional Requirements	
	Initial Recommended Dosage	Maximum Dosage
Birth to 2 years of age (including preterm and term neonates)	0.5 to 1 g/kg/day	3 g/kg/day
Pediatric patients 2 to <12 years of age	1 to 2 g/kg/day	3 g/kg/day
Pediatric patients 12 to 17 years of age	1 g/kg/day	2.5 g/kg/day
Adults	1 to 2 g/kg/day	2.5 g/kg/day

SMOFlipid is contraindicated in patients with known hypersensitivity to fish, egg, soybean, peanut, or any of the active or inactive ingredients, and severe disorders of lipid metabolism characterized by hypertriglyceridemia (serum triglycerides >1,000 mg/dL).

Clinical Decompensation with Rapid Infusion of Intravenous Lipid Emulsion in Neonates and Infants: Acute respiratory distress, metabolic acidosis, and death after rapid infusion of intravenous lipid emulsions have been reported.

Parenteral Nutrition-Associated Liver Disease: Increased risk in patients who received parenteral nutrition for greater than 2 weeks, especially preterm neonates. Monitor liver tests; if abnormalities occur consider discontinuation or dosage reduction.

Hypersensitivity Reactions: Monitor for signs or symptoms. Discontinue infusion if reactions occur.

Risk of Infections, Fat Overload Syndrome, Refeeding Syndrome, Hypertriglyceridemia, and Essential Fatty Acid Deficiency: Monitor for signs and symptoms; monitor laboratory parameters.

Aluminum Toxicity: Increased risk in patients with renal impairment, including preterm neonates.

Most common adverse drug reactions (≥5%) from clinical trials in adults were nausea, vomiting, and hyperglycemia. Most common adverse drug reactions (≥5%) from clinical trials in pediatric patients were anemia, vomiting, increased gamma-glutamyltransferase, and nosocomial infection.

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.

This Important Safety Information does not include all the information needed to use SMOFlipid safely and effectively. Please see full prescribing information for SMOFlipid (lipid injectable emulsion), for intravenous use at www.FreseniusKabiNutrition.com/SMOFlipidPI.

Omegaven®

(fish oil triglycerides) injectable emulsion, for intravenous use

INDICATIONS AND USAGE

Omegaven is indicated as a source of calories and fatty acids in pediatric patients with parenteral nutrition-associated cholestasis (PNAC).

Limitations of Use

Omegaven is not indicated for the prevention of PNAC. It has not been demonstrated that Omegaven prevents PNAC in parenteral nutrition (PN)-dependent patients.

It has not been demonstrated that the clinical outcomes observed in patients treated with Omegaven are a result of the omega-6: omega-3 fatty acid ratio of the product.

IMPORTANT SAFETY INFORMATION

Protect the admixed PN solution from light. Prior to administration, correct severe fluid and electrolyte disorders and measure serum triglycerides to establish a baseline level. Initiate dosing in PN-dependent pediatric patients as soon as direct or conjugated bilirubin levels are 2 mg/dL or greater. The recommended nutritional requirements of fat and recommended dosages of Omegaven to meet those requirements for pediatric patients are provided in Table 1, along with recommendations for the initial and maximum infusion rates. Administer Omegaven until direct or conjugated bilirubin levels are less than 2 mg/dL or until the patient no longer requires PN.

Table 1: Recommended Pediatric Dosage and Infusion Rate

Nutritional Requirements	Direct Infusion Rate	
	Initial	Maximum
Recommended Initial Dosage and Maximum Dosage		
1 g/kg/day; this is also the maximum daily dose	0.2 mL/kg/hour for the first 15 to 30 minutes; gradually increase to the required rate after 30 minutes	1.5 mL/kg/hour

Omegaven is contraindicated in patients with known hypersensitivity to fish or egg protein or to any of the active ingredients or excipients, severe hemorrhagic disorders due to a potential effect on platelet aggregation, severe hyperlipidemia or severe disorders of lipid metabolism characterized by hypertriglyceridemia (serum triglyceride concentrations greater than 1,000 mg/dL).

Clinical Decompensation with Rapid Infusion of Lipid Injectable Emulsions in Neonates and Infants: Acute respiratory distress, metabolic acidosis, and death after rapid infusion of intravenous lipid emulsions have been reported. Hypertriglyceridemia was commonly reported. Strictly adhere to the recommended total daily dosage; the hourly infusion rate should not exceed 1.5 mL/kg/hour. Carefully monitor the infant's ability to eliminate the infused lipids from the circulation (e.g., measure serum triglycerides and/or plasma free fatty acid levels). If signs of poor clearance of lipids from the circulation occur, stop the infusion and initiate a medical evaluation.

Hypersensitivity Reactions: Monitor for signs or symptoms. Discontinue infusion if reaction occurs.

Infections, Fat Overload Syndrome, Refeeding Syndrome, and Hypertriglyceridemia: Monitor for signs and symptoms; monitor laboratory parameters.

Aluminum Toxicity: Increased risk in patients with renal impairment, including preterm infants.

Monitoring and Laboratory Tests: Routine laboratory monitoring is recommended, including monitoring for essential fatty acid deficiency.

The most common adverse drug reactions (>15%) are: vomiting, agitation, bradycardia, apnea and viral infection.

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.

This Important Safety Information does not include all the information needed to use Omegaven safely and effectively. Please see full prescribing information for Omegaven (fish oil triglycerides) injectable emulsion for intravenous use at www.FreseniusKabiNutrition.com/OmegavenPI.

Intralipid[®]

20% (lipid injectable emulsion), for intravenous use

INDICATIONS AND USAGE

Intralipid is indicated as a source of calories and essential fatty acids for patients requiring parenteral nutrition (PN) and as a source of essential fatty acids for prevention of essential fatty acid deficiency (EFAD).

IMPORTANT SAFETY INFORMATION

Intralipid 20% Pharmacy Bulk Package (lipid injectable emulsion), for intravenous use and Intralipid 30% Pharmacy Bulk Package (lipid injectable emulsion), for intravenous use are for admixing use only and are **not** intended for direct intravenous administration.

Intralipid 30% (lipid injectable emulsion) Pharmacy Bulk Package must be combined with other PN fluids. Diluting Intralipid 30% with an intravenous fluid such as normal saline or other diluent does not produce a dilution that is equivalent in composition to Intralipid 10% or 20% intravenous lipid emulsions. Therefore, diluents other than dextrose and amino acids should not be used to prepare admixtures for direct intravenous administration. When Intralipid 30% is diluted, strictly adhere to the recommended total daily dosage; the hourly infusion rate should not exceed 0.125 g/kg/hour for neonates and infants.

Recommended dosage depends on age, energy expenditure, clinical status, body weight, tolerance, ability to metabolize and eliminate lipids, and consideration of additional energy given to the patient. Protect the admixed PN solution from light. Use a 1.2 micron in-line filter during administration.

Dosage for Intralipid 20%

Age	Nutritional Requirements	
	Initial Recommended Dosage	Maximum Dosage
Birth to 2 years of age (including preterm and term neonates)	0.5 g/kg/day	3 g/kg/day
Pediatric patients 2 to <12 years of age	1 to 2 g/kg/day	2.5 g/kg/day
Pediatric patients 12 to 17 years of age	1 g/kg/day	2 g/kg/day
Adults	1 g/kg/day (stable) ≤1 g/kg/day (critically ill)	2.5 g/kg/day

Intralipid is contraindicated in patients with:

- Known hypersensitivity to egg, soybean, or peanut, or any of the active ingredients or excipients
- Severe disorders of lipid metabolism characterized by hypertriglyceridemia (serum triglyceride > 1,000 mg/dL)

Risk of Clinical Decompensation with Rapid Infusion of Lipid Injectable Emulsion in Neonates and Infants: Acute respiratory distress, metabolic acidosis, and death after rapid infusion of lipid injectable emulsions have been reported. When Intralipid 30% is diluted, strictly adhere to the recommended total daily dosage; the hourly infusion rate should not exceed 0.125 g/kg/hour for neonates and infants.

Risk of Parenteral Nutrition-Associated Liver Disease (PNALD): Increased risk in patients who receive PN for extended periods of time, especially preterm neonates. Monitor liver function tests; if abnormalities occur consider discontinuation or dosage reduction.

Hypersensitivity Reactions: Monitor for signs or symptoms. Discontinue infusion if reactions occur.

Risk of Infections, Fat Overload Syndrome, Refeeding Syndrome, and Hypertriglyceridemia: Monitor for signs and symptoms; monitor laboratory parameters.

Aluminum Toxicity: Increased risk in patients with renal impairment, including preterm neonates.

Most common adverse drug reactions (≥5%) from clinical trials in adults were nausea, vomiting, and pyrexia. Most common adverse drug reactions (≥5%) from clinical trials in pediatric patients were anemia, vomiting, increased gamma-glutamyltransferase, and cholestasis.

Vitamin K Antagonists (e.g., warfarin): Anticoagulant activity may be counteracted; increase monitoring of coagulation parameters.

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.

This Important Safety Information does not include all the information needed to use Intralipid safely and effectively. Please see full Prescribing Information, for intravenous use at www.FreseniusKabiNutrition.com/Intralipid20PI and www.FreseniusKabiNutrition.com/Intralipid30PI.

Kabiven®

(amino acids, electrolytes, dextrose, and lipid injectable emulsion), for intravenous use

Perikabiven®

(amino acids, electrolytes, dextrose, and lipid injectable emulsion), for intravenous use

INDICATIONS AND USAGE

KABIVEN and PERIKABIVEN are each indicated as a source of calories, protein, electrolytes and essential fatty acids for adult patients requiring parenteral nutrition when oral or enteral nutrition is not possible, insufficient, or contraindicated. KABIVEN and PERIKABIVEN may be used to prevent essential fatty acid deficiency or treat negative nitrogen balance in adult patients.

Limitations of Use

Neither KABIVEN nor PERIKABIVEN is recommended for use in pediatric patients <2 years including preterm infants because the fixed content of the formulation does not meet nutritional requirements in this age group.

IMPORTANT SAFETY INFORMATION

KABIVEN is indicated for intravenous infusion into a **central vein**. PERIKABIVEN is indicated for intravenous infusion into a **peripheral or central vein**. It is recommended to mix the contents thoroughly by inverting the bags upside down to ensure a homogenous admixture. Ensure the vertical seals between chambers are broken and the contents of all three chambers for KABIVEN and PERIKABIVEN are mixed together prior to infusion. The dosage of KABIVEN and PERIKABIVEN should be individualized based on the patient's clinical condition (ability to adequately metabolize amino acids, dextrose and lipids), body weight and nutritional/fluid requirements, as well as additional energy given orally/enterally to the patient. Prior to administration of KABIVEN and PERIKABIVEN, correct severe fluid, electrolyte and acid-base disorders. Before starting the infusion, obtain serum triglyceride levels to establish the baseline value. Do not exceed the recommended maximum infusion rate of 2.6 mL/kg/hour for KABIVEN and 3.7 mL/kg/hour for PERIKABIVEN.

KABIVEN and PERIKABIVEN are contraindicated in:

- Concomitant treatment with ceftriaxone in neonates (28 days of age or younger)
- Known hypersensitivity to egg, soybean, peanut, or any of the active or inactive ingredients.
- Severe disorders of lipid metabolism characterized by hypertriglyceridemia (with serum triglyceride concentration >1,000 mg/dL).
- Inborn errors of amino acid metabolism.
- Cardiopulmonary instability
- Hemophagocytic syndrome

Clinical Decompensation with Rapid Infusion of Lipid Injectable Emulsions in Neonates and Infants: Acute respiratory distress, metabolic acidosis, and death after rapid infusion of intravenous lipid emulsions have been reported.

Parenteral Nutrition-Associated Liver Disease: Increased risk in patients who receive parenteral nutrition for greater than 2 weeks. Monitor liver tests; if abnormalities occur, consider discontinuation or dosage reduction.

Pulmonary Embolism and Respiratory Distress due to Pulmonary Vascular Precipitates: If signs of pulmonary distress occur, stop the infusion and initiate a medical evaluation.

Hypersensitivity reactions: Monitor for signs or symptoms and discontinue infusion if reactions occur.

Precipitation with Ceftriaxone: Do not administer ceftriaxone simultaneously with KABIVEN or PERIKABIVEN via a Y-site.

Infection, fat overload, hyperglycemia and refeeding complications: Monitor for signs and symptoms; monitor laboratory parameters.

The most common adverse reactions for KABIVEN ($\geq 3\%$) are nausea, pyrexia, hypertension, vomiting, decreased hemoglobin, decreased total protein, hypokalemia, decreased potassium, and increased gamma glutamyltransferase. The most common adverse reactions for PERIKABIVEN ($\geq 3\%$) are hyperglycemia, hypokalemia, pyrexia, and increased blood triglycerides.

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.

Coumarin and coumarin derivatives, including warfarin: Anticoagulant activity may be counteracted; monitor laboratory parameters

This Important Safety Information does not include all the information needed to use KABIVEN and PERIKABIVEN safely and effectively. Please see full prescribing information for KABIVEN and PERIKABIVEN (amino acids, electrolytes, dextrose and lipid injectable emulsion), for intravenous use at www.FreseniusKabiNutrition.com/KabivenPI and www.FreseniusKabiNutrition.com/PerikabivenPI.

Innovations

With an expansive PN portfolio, clinicians have access to **more options** for **more patients**



The **first** and **only** 4-oil lipid emulsion for adult and pediatric patients, including term and preterm neonates, in the US¹



The **first** and **only** fish oil lipid emulsion for pediatric patients with PNAC in the US⁷



The **longest-standing** lipid for PN in the US⁸



The **first** and **only** 3CB products for adult PN^{9,10}



Electrolytes and **additives** can help support diverse patient needs

Future innovations are in the works. Stay tuned for more in PN.

Bringing **more** to PN, today and every day



For more information about
Fresenius Kabi's portfolio of products,
please visit: [FreseniusKabiNutrition.com](https://www.freseniuskabinutrition.com)

Sources: **1.** SMOFlipid Prescribing Information, Fresenius Kabi USA, LLC. 2025. **2.** Deckelbaum RJ, Hamilton JA, Moser A, et al. Medium-chain versus long-chain triacylglycerol emulsion hydrolysis by lipoprotein lipase and hepatic lipase: implications for the mechanisms of lipase action. *Biochemistry*. 1990;29(5):1136-1142. **3.** Kalish BT, Fallon EM, Puder M. A tutorial on fatty acid biology. *JPEN J Parenter Enteral Nutr*. 2012;36(4):380-388. **4.** Vanek VW, Seidner DL, Allen P, et al. A.S.P.E.N. position paper: Clinical role for alternative intravenous fat emulsions. *Nutr Clin Pract*. 2012;27(2):150-192. **5.** Calder PC, Jensen GL, Koletzko BV, Singer P, Wanten GJ. Lipid emulsions in parenteral nutrition of intensive care patients: current thinking and future directions. *Intensive Care Med*. 2010;36(5):735-749. **6.** ASPEN Lipid Injectable Emulsion Safety Recommendations for Adult Patients. ASPEN website. 2021. Accessed October 21, 2025. <https://nutritioncare.org/wp-content/uploads/2024/12/ILE-Safety-Recommendations-Adult.pdf> **7.** Omegaven Prescribing Information, Fresenius Kabi USA, LLC. 2025. **8.** Intralipid Prescribing Information, Fresenius Kabi USA, LLC. 2025. **9.** Kabiven Prescribing Information, Fresenius Kabi USA, LLC. 2025. **10.** Perikabiven Prescribing Information, Fresenius Kabi USA, LLC. 2025.