NUMETA

This abbreviated summary of product characteristics (SPC) is intended for international use. Please note that it may differ from the licensed SPC in the country where you are practicing. Therefore, please always consult your country-specific SPC or package leaflet.

NAME OF THE MEDICINAL PRODUCT
Numeta G13E emulsion for infusion
Numeta G16E emulsion for infusion
Numeta G19E emulsion for infusion

QUALITATIVE AND QUANTITATIVE COMPOSITION
This medicinal product is presented in the form of a three chamber bag. Each bag contains a sterile non-pyrogenic combination of a glucose solution, a paediatric amino acids solution, with electrolytes, and a lipid emulsion, as described below

Product	Container Size	50% glucose solution	5.9% amino acids solution with electrolytes	12.5% lipid emulsion
Numeta G13E	300 mL	80 mL	160 mL	60 mL
Numeta G16E	500 mL	155 mL	221 mL	124 mL
Numeta G19E	1000 mL	383mL	392 mL	225 mL

If lipid administration is undesirable, the design of the bag allows the possibility to activate only the peel seal between the amino acids/electrolytes and glucose chambers, leaving the peel seal between the amino acids and lipid chambers intact. The content of the bag can subsequently be infused with or without lipids.

CLINICAL PARTICULARS

Therapeutic indications
Numeta G13E is indicated for parenteral nutrition in preterm newborn infants when oral or enteral nutrition is not possible, insufficient or contraindicated.
Numeta G16E is indicated for parenteral nutrition in term newborn infants and children up to 2 years when oral or enteral nutrition is not possible, insufficient or contraindicated.
Numeta G19E is indicated for parenteral nutrition in children older than 2 years and adolescents 16-18 years old when oral or enteral nutrition is not possible, insufficient or contraindicated.

Posology and method of administration **Posology**
The dosage depends on energy expenditure, the patient's weight, age, clinical status, and on the ability to metabolize the constituents of Numeta, as well as on additional energy or proteins given orally/enterally. Total electrolyte and macronutrient composition is dependent on the number of activated chambers.

The maximum daily dose should not be exceeded. Due to the static composition of the multi-chamber bag, the ability to simultaneously meet all nutrient needs of the patient may not be possible. Clinical situations may exist where patients require amounts of nutrients varying from the from the static composition.

The maximal recommended hourly rate of infusion and volume per day depend on the constituent. The first of these limits to be reached sets the maximum daily dose. The guidelines for maximal recommended hourly rate of infusion and volume per day are:

For Numeta G13E

	Activated 2CB (240 mL)	Activated 3CB (300 mL)
Maximal rate of infusion in mL/kg/h	5.1	6.4
Maximal amount in mL/kg/day	102.3	127.9

For Numeta G16E

	Activated 2CB (376 mL)	Activated 3CB (500 mL)
Maximal rate of infusion in mL/kg/h	5.8	5.5
Maximal amount in mL/kg/day	72.3	96.2

For Numeta G19E

	Activated 2CB (775 mL)	Activated 3CB (1000 mL)
Maximal rate of infusion in mL/kg/h	4.7	4.6
Maximal amount in mL/kg/day	64.8	83.6

Method of administration
Numeta G13E and G16E: When used in neonates and children below 2 years the solution (in bags and administration sets) should be protected from light exposure until administration is completed.

Numeta G19E: The solution (in bags and administration sets) should be protected from light exposure from point of admixture through administration.

The flow rate should be increased gradually during the first hour. Upon discontinuation of Numeta, the flow rate should be decreased gradually during the last hour. The administration flow rate must be adjusted taking into account the dose being administered, the daily volume intake, and the duration of the infusion.

In preterm newborn infants, continuous parenteral administration over 24 hours is usually recommended; however, the same bag should not be activated, hung and infused longer than 24 hours. Cyclic infusions should be managed according to the patient's metabolic tolerance.

Treatment with parenteral nutrition may be continued for as long as is required by the patient's clinical conditions.

For Numeta G13E / Numeta G16E / Numeta G19E
Due to its high osmolarity, undiluted Numeta can only be administered through a central vein. However, sufficient dilution of Numeta with water for injection lowers the osmolarity and allows peripheral infusion

Contraindications
The general contraindications for administering Numeta as an activated 2 chamber bag for intravenous infusion are as follows:
- Hypersensitivity to egg, soy or peanut proteins, or to any of the active substances, excipients, or components of the container
- Congenital abnormality of the amino acid metabolism
- Pathologically elevated plasma concentrations of sodium, potassium, magnesium, calcium and/or phosphorus
- Concomitant treatment with ceftriaxone even if separate infusion lines are used
- Severe hyperglycaemia

The addition of lipids (administering Numeta as an activated 3 chamber bag for intravenous emulsion) is contraindicated in the following additional clinical situations:
- Severe hyperlipidaemia, or severe disorders of lipid metabolism characterized by hypertriglyceridaemia.

Undesirable effects

The pooled data from clinical trials and the postmarketing experience indicate the following adverse drug reactions (ADRs) related to Numeta:

Clinical Trial and Post-marketing experience Adverse Reactions		
System Organ Class (SOC)	**Preferred MedDRA Term**	**Frequency[b]**
METABOLISM AND NUTRITION DISORDERS	Hypophosphataemia [a]	Common
	Hyperglycaemia [a]	Common
	Hypercalcaemia [a]	Common
	Hypertriglyceridaemia [a]	Common
	Hyperlipidaemia [a]	Uncommon
	Hyponatraemia [a]	Common
HEPATOBILIARY DISORDERS	Cholestasis	Uncommon
SKIN AND SUBCUTANEOUS TISSUE DISORDERS	Skin necrosis [c]	Not known
	Soft tissue injury [c]	Not known
GENERAL DISORDERS AND ADMINISTRATION SITE CONDITION	Extravasation [c]	Not known

[a] Blood samples drawn during the infusion (without fasting conditions).
[b] Frequency is based upon the following categories: Very Common (≥1/10); Common (≥1/100 - <1/10), Uncommon (≥1/1,000 - <1/100), Rare (≥1/10,000 - <1/1,000), Very Rare (<1/10,000), Not known (cannot be estimated based on available data).
[c] These adverse reactions have been reported only for Numeta G13E and G16E when peripherally administered with insufficient dilution

The following adverse reactions have been reported with other parenteral nutrition admixtures:

Fat overload syndrome: reduced ability to remove the lipids contained in Numeta may result in a "fat overload syndrome" which may be caused by overdose and/or infusion rate higher than recommended, and is associated with a sudden deterioration in the patient's clinical condition. It is characterized by hyperlipidemia, fever, liver fatty infiltration, hepatomegaly (deteriorating liver function), anemia, leukopenia, thrombocytopenia, coagulation disorders and central nervous system manifestations (e.g.coma). The syndrome is usually reversible when the infusion of the lipid emulsion is stopped.

Pulmonary vascular precipitates (pulmonary vascular embolism and respiratory distress).

Precautions
For Numeta G13E, Numeta G16E and Numeta G19E:
Do not add other medicinal products or substances to one of the three chambers of the bag or to the reconstituted solution/ emulsion without first confirming their compatibility and the stability of the resulting preparation.

Cardiovascular: Use with caution in patients with pulmonary edema or heart failure. Fluid status should be closely monitored. Renal: Use with caution in patients with renal insufficiency. Fluid and electrolyte status, including magnesium, should be closely monitored in these patients. Severe water and electrolyte equilibration disorders, severe fluid overload states, and severe metabolic disorders should be corrected before starting the infusion. Hepatic/Gastrointestinal: Use with caution in patients with severe liver insufficiency, including cholestasis, or elevated liver enzymes. Liver function parameters should be closely monitored. Endocrine and Metabolism: Metabolic complications may occur if the nutrient intake is not adapted to the patient's requirements, or the metabolic capacity of any given dietary component is not accurately assessed. Adverse metabolic effects may arise from administration of inadequate or excessive nutrients or from inappropriate composition of an admixture for a particular patient's needs. Hematologic: Use with caution in patients with severe blood coagulation disorders. Blood count and coagulation parameters should be closely monitored.

For Numeta G13E and Numeta G16E: Light exposure of solutions for intravenous parenteral nutrition, especially after admixture with trace elements and/or vitamins may have adverse effects on clinical outcome in neonates, due to generation of peroxides and other degradation products. When used in neonates and children below 2 years, Numeta G13E and Numeta G16E should be protected from ambient light until administration is completed.

Numeta G19 should be protected from light from the point of admixture through administration.

For Numeta G16E
Hypermagnesaemia: Numeta G16E provides 0.3 mmol/kg/d of magnesium when administered at maximum dose There is a possibility that this may lead to hypermagnesaemia. If serum magnesium levels are elevated (above reference range normal values) the infusion of Numeta G16E should be stopped or infusion rate reduced as deemed clinically appropriate and safe.

For the detailed posology, Special warnings and precautions for use, interactions, pharmacological properties and pharmaceutical particulars, please refer to the full SPC. Medicinal products are subject to medical prescription Revised August 2020