Intended for ROI healthcare professionals

Peyona®
caffeine citrate

**PEYONA® Prescribing Information (ROI)**

**Peyona® 20 mg/mL Solution For Infusion And Oral Solution Prescribing Information**

Please refer to Summary of Product Characteristics (SPC) before prescribing.

**Presentation:** Peyona is a clear, colourless, aqueous solution at pH=4.7 and an osmolality of 144 to 166 mOsm/kg. Each 1mL ampoule contains 20mg of caffeine citrate (20mg of caffeine citrate is equivalent to 10mg caffeine). **Indication:** Treatment of primary apnoea of premature newborns. **Dosage and administration:** The recommended dose regimen in previously untreated infants is a loading dose of 20mg caffeine citrate per kg body weight administered by slow intravenous infusion over 30 minutes, using a syringe infusion pump or other metered infusion device. After an interval of 24 hours, maintenance doses of 5mg/kg body weight may be administered by slow intravenous infusion over 10 minutes every 24 hours. Alternatively, maintenance doses of 5 mg/kg body weight may be administered by oral administration, such as through a nasogastric tube every 24 hours. The dose expressed as caffeine base is one-half the dose when expressed as caffeine citrate (20mg caffeine citrate are equivalent to 10mg caffeine base). In preterm newborn infants with insufficient clinical response to the recommended loading dose, a second loading dose of 10-20mg/kg maximum may be given after 24 hours. Higher maintenance doses of 10mg/kg body weight could be considered in cases of insufficient response. Where clinically indicated, caffeine plasma levels should be monitored. The diagnosis of apnoea of prematurity may need to be reconsidered if patients do not respond adequately to a second loading dose or maintenance dose of 10mg/kg/day. *Duration of treatment:* The optimal duration of treatment has not been established. Treatment is usually continued until the infant has reached a post-menstrual age of 37 weeks, by which time apnoea of prematurity usually resolves spontaneously. Administration should be stopped when the patient has 5-7 days without a significant apnoeic attack. If the patient has recurrent apnoea, administration can be restarted with either a maintenance dose or a half loading dose, depending upon the time interval from stopping to recurrence of apnoea. Because of the slow elimination of caffeine in this patient population, there is no requirement for dose tapering on cessation of treatment. As there is a risk for recurrence of apnoeas after cessation of treatment, monitoring of the patient should be continued for approximately one week. *Method of administration:* By intravenous infusion and by the oral route. Not to be administered by any other route. When given IV, caffeine citrate should be administered by controlled IV infusion. Caffeine citrate can be either used without dilution or diluted in sterile solutions for infusion such as glucose 50mg/mL (5%), or sodium chloride 9mg/mL (0.9%) or calcium gluconate 100mg/mL (10%) immediately after withdrawal from the ampoule. **Contraindications:** Hypersensitivity to active substance or excipients. **Warnings and precautions:** Other causes of apnoea should be ruled out or properly treated prior to initiation of treatment. Baseline plasma caffeine concentrations should be measured prior to use in newborn infants born to mothers who consumed large quantities of caffeine prior to delivery or in newborns previously treated with theophylline. Exercise extreme caution if used in newborns with seizure disorder. Caffeine has been shown to increase heart rate, left ventricular output, and stroke volume therefore caution should be exercised if used in newborns with known cardiovascular disease. Caution if used in preterm newborns with impaired renal or hepatic function or suffering gastro-oesophageal reflux. Careful monitoring for development of necrotising enterocolitis should be undertaken in all newborns. Caffeine citrate causes a generalised increase in metabolism, which may result in higher energy and nutrition requirements during therapy. The diuresis and electrolyte loss induced by caffeine citrate may necessitate correction of fluid and electrolyte disturbances. Peyona contains less than 1 mmol sodium (23 mg) per dose. **Interactions:** Inter-conversion between caffeine and theophylline occurs in preterm newborn infants; these active substances should not be used concurrently. Caffeine has the potential to interact with active substances that are substrates for, inhibitors or inducers of $CYP_1A_2$. However, caffeine metabolism in preterm newborn infants is limited due to their immature hepatic enzyme systems. **Fertility, pregnancy and lactation:** Caffeine in animal studies, at high doses, was shown to be embryotoxic and teratogenic. These effects are not relevant with regard to short term administration in the preterm infant population. Caffeine is excreted into breast milk and readily crosses the placenta into the foetal circulation. Breast-feeding mothers of newborn infants should not ingest caffeine-containing foods, beverages or medicinal products containing caffeine. **Side effects:** The known pharmacology and toxicology of caffeine and other methylxanthines predict the likely adverse reactions. Effects described include central nervous system (CNS) stimulation such as convulsion, irritability, restlessness and jitteriness, cardiac effects such as tachycardia, arrhythmia, hypertension and increased stroke volume, metabolism and nutrition disorders such as hyperglycaemia. These effects are dose related and may necessitate measurement of plasma levels and dose reduction. The adverse reactions described in short and long term published literature and obtained from a post-authorisation safety study are: *Common*: hyperglycaemia, tachycardia, infusion site phlebitis, infusion site

inflammation; *Uncommon:* convulsion, arrhythmia; *Rare*: hypersensitivity reaction; *Not known*: sepsis, hypoglycaemia, failure to thrive, feeding intolerance, irritability, jitteriness, restlessness, brain injury, deafness, increased left ventricular output and increased stroke volume, regurgitation, increased gastric aspirate, necrotising enterocolitis, urine output increased, urine sodium and calcium increased, haemoglobin decreased, thyroxine decreased. Caffeine may suppress erythropoietin synthesis and hence reduce haemoglobin concentration with prolonged treatment. Transient falls in thyroxine (T4) have been recorded in infants at the start of therapy but these are not sustained with maintained therapy. A higher frequency of adverse reactions (predominantly cardiac disorders) in a small number of very premature infants with renal/hepatic impairment compared to premature infants without organ impairment has been observed (Refer to SPC for full list of side effects). Additional information is available on request. **Legal category:** POM. **Pack:** 10 x 1mL ampoules. **Marketing authorisation no:** EU/1/09/528/002. **Ireland Distributor:** Chiesi Limited, 333 Styal Road, Manchester, M22 5LG, United Kingdom. **Date of Preparation:** March 2024.

**Adverse events should be reported to HPRA Pharmacovigilance,**
**Website: www.hpra.ie, e-mail: medsafety@hpra.ie.**
**Adverse events should also be reported to Chiesi Limited on 1800 817459 (IE) or PV.UK@Chiesi.com.**