## Important information for healthcare professionals for the safe use of PALYNZIQ<sup>®</sup> (pegvaliase injection)

This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions. Reporting forms and information can be found at <u>https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada.html</u>

Hypersensitivity reactions including acute systemic hypersensitivity reactions (anaphylaxis) can occur at any time during PALYNZIQ® treatment. Please read the following information carefully before prescribing PALYNZIQ® to your patient and refer to the Product Monograph for further information.

# Please provide the Important Information for Patients for the safe use of PALYNZIQ®, the PALYNZIQ® Patient alert card and the Patient Medication Information to all patients.

Please report any suspected adverse reactions (including but not limited to hypersensitivity) to **drugsafety@bmrn.com** or contact BioMarin Pharmaceutical Inc. at 1-866-906-6100.

Reporting of any suspected adverse reactions is possible also via national reporting systems. Reporting forms and information can be found at <u>https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada.html</u>

## **Indication for use**

PALYNZIQ® is indicated to reduce blood phenylalanine concentrations in patients with phenylketonuria (PKU) aged 16 years and older who have inadequate blood phenylalanine control (blood phenylalanine levels greater than 600 micromol/l) despite dietary management.

The safety and efficacy of PALYNZIQ® in children and adolescents from birth to less than 16 years have not been established.

## Acute systemic hypersensitivity – the clinical data

•Hypersensitivity reactions, including acute systemic hypersensitivity reactions (anaphylaxis), angioedema, and serum sickness, have been reported in patients treated with PALYNZIQ® and can occur at any time during treatment. PALYNZIQ® may also increase hypersensitivity to other PEGylated injectable medicinal products

•In clinical trials, 16 out of 285 (6%) patients experienced 25 acute systemic hypersensitivity reactions (anaphylaxis) of any severity based on acute onset of skin and/or mucosal tissue manifestations and at least either respiratory compromise or reduced blood pressure (or associated symptoms of end organ dysfunction)

•Manifestations included a combination of the following acute signs and symptoms: syncope, hypotension, hypoxia, dyspnoea, wheezing, chest discomfort/chest tightness, tachycardia, angioedema (swelling of face, lips, eyes, and tongue), flushing, rash, urticaria, pruritus, and gastrointestinal symptoms (vomiting, nausea, and diarrhea)

## **Risk Mitigation Material**

•Four out of 16 (1%; 4/285) patients experienced a total of 5 episodes of acute systemic hypersensitivity reactions(anaphylaxis) considered severe based on the presence of: cyanosis or oxygen saturation (SpO<sub>2</sub>) less than or equal to 92%, hypotension (systolic blood pressure below 90 mmHg in adults) or syncope

•Acute systemic hypersensitivity reactions (anaphylaxis) were most frequent during induction and titration phase (5% of patients; 19 episodes over mean treatment duration of 12 months) and decreased in maintenance phase (2% of patients; 6 episodes over mean treatment duration of 28 months). The risk of an acute systemic hypersensitivity reaction (anaphylaxis) occurring is 7-fold higher in induction/titration phase compared to maintenance phase

•Acute systemic hypersensitivity reactions(anaphylaxis) generally occurred within the first hour after injection (88%; 22/25 episodes); however, reactions have occurred up to 24 hours after dosing

•Ten out of the 16 patients who experienced an acute systemic hypersensitivity reaction (anaphylaxis) were re challenged and 4 patients had at least one recurrence. Seven out of the 16 patients discontinued treatment. All episodes resolved without sequelae

## Prevention of acute systemic hypersensitivity

#### **1.Premedication**

•Premedication prior to each dose is required during induction and titration

•Patients should be instructed to pre-medicate with an H1-receptor antagonist, H2-receptor antagonist, and an antipyretic

•During maintenance, premedication may be considered for subsequent injections based upon patient tolerability to PALYNZIQ®

#### 2.Initial injection

Prior to first dose of PALYNZIQ®, the patient should be trained on the following:

•How to recognise the signs and symptoms of an acute systemic hypersensitivity reaction (anaphylaxis) and to seek immediate medical care if a reaction occurs

•How to properly administer epinephrine injection device (auto injector or pre-filled syringe/pen)

Initial administration(s) should be performed under supervision of a healthcare professional and patients should be closely observed for at least 60 minutes following each of these initial injection(s)

#### **3.Epinephrine**

•Epinephrine injection device (auto injector or pre-filled syringe/pen) should be prescribed to patients receiving this medicinal product. Patients should be instructed to carry epinephrine injection device with them at all times during PALYNZIQ® treatment

•The risks associated with epinephrine use should be considered when prescribing PALYNZIQ®. Refer to the epinephrine product information for complete information

## **Risk Mitigation Material**

#### 4.Observer

•For at least the first 6 months of treatment, when the patient is self-injecting (i.e. when administration is not under healthcare professional supervision), an observer must be present during and for at least 60 minutes after each administration

•After 6 months of PALYNZIQ® treatment, the need for an observer may be reconsidered

•An observer is someone who would be present with the patient during and after PALYNZIQ® administration, is able to recognise the signs and symptoms of an acute systemic hypersensitivity reaction (anaphylaxis), can call for emergency medical support and administer epinephrine, if warranted

#### 5. Competency in Independent Self-injection

Prior to independent self-injection by the patient, the healthcare professional should:

- •Train the patient on proper self-administration of PALYNZIQ®
- •Assess patient competency in self-administration of PALYNZIQ®

•Train the observer to recognise signs and symptoms of an acute systemic hypersensitivity reaction (anaphylaxis) and to seek immediate medical care if a reaction occurs, and how to properly administer epinephrine injection device (auto-injector or pre-filled syringe/pen)

•Provide the patient/caregiver with the Important Information for Patients and Trained Observers for the Safe Use of PALYNZIQ® and the Patient Alert Card

# Management of hypersensitivity reactions including acute systemic hypersensitivity reaction (anaphylaxis)

Acute systemic hypersensitivity reactions (anaphylaxis) require treatment with epinephrine and immediate medical care. For severe systemic hypersensitivity reactions or recurrence of acute systemic hypersensitivity reactions (anaphylaxis), patients should seek immediate medical care and PALYNZIQ® should be permanently discontinued.

Management of other hypersensitivity reactions should be based on the severity of the reaction. In clinical trials, this has included:

- Dosage adjustments
- Drug interruption
- Additional antihistamines
- Antipyretic
- Corticosteroids

## **Risk Mitigation Material**

## **Retreatment following acute systemic hypersensitivity reaction (anaphylaxis)**

Patients who experience a severe acute systemic hypersensitivity reaction (anaphylaxis) or recurrence of a mild to moderate acute systemic hypersensitivity reaction (anaphylaxis) should seek immediate medical care and PALYNZIQ® should be permanently discontinued.

The prescribing physician should consider the risks and benefits of readministering the medicinal product following resolution of the first mild to moderate acute systemic hypersensitivity reaction.

Upon re-administration, the first dose must be administered with premedication under

the supervision of a healthcare professional with the ability to manage acute systemic hypersensitivity reactions.

The prescribing physician should continue or consider resuming use of premedication.

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