

VPRIV[®] Treatment by Home Infusion

Guide for Physicians Treating Patients with Gaucher Disease

Home Infusion of VPRIV®

Some patients with Type 1 Gaucher disease treated with VPRIV® (velaglycerase alfa) may opt to receive infusions at home. The decision to receive infusions at home should be made by the patient and treating physician after at least three consecutive well tolerated VPRIV® infusions under medical supervision in a hospital, clinic or office setting to ensure satisfactory tolerance of the infusions. Appropriate medical support, including adequately trained personnel in emergency measures, should be readily available when VPRIV® is administered.

Checklist to determine patient eligibility prior to initiation of home infusion:

Patient had at least three consecutive well-tolerated VPRIV® infusions (no infusion-related reactions) in the clinic.	<input type="checkbox"/>
Patient considered medically stable.	<input type="checkbox"/>
History of adherence to infusion schedule.	<input type="checkbox"/>
Patient has agreed to receive VPRIV® at home.	<input type="checkbox"/>
The homecare nurse, patient and caregiver have been educated about home infusion, the associated risks, the possible complications, and the provision of medical assistance at home, including emergency contact details.	<input type="checkbox"/>
The homecare nurse and/or caregiver have been adequately trained in administering VPRIV® infusion.	<input type="checkbox"/>
Confirm that the patient's home is safe (clean, hygienic, storage area for supplies, drug and emergency medication) and adequately equipped.	<input type="checkbox"/>
Ensure that a rapid and reliable communication measures have been established if problems occur.	<input type="checkbox"/>
Provide medications to mitigate any risk that occur to enable an emergency response, if necessary.	<input type="checkbox"/>
The homecare nurse, patient and/or caregiver has received the educational materials intended for them.	<input type="checkbox"/>

Monitor the patient for infusion-related reactions (IRR), including allergic-type hypersensitivity reactions (especially in the first 6 months of treatment).

The most commonly observed symptoms of infusion-related reactions (IRR - any adverse drug reaction occurring within 24 hours after the initiation of velaglycerase alfa infusion) were: headache, dizziness, hypotension, hypertension, nausea, fatigue/weakness and pyrexia. In patients who had not used VPRIV® before, the majority of IRR occurred during the first 6 months of treatment. Additional IRR of chest discomfort, dyspnoea, and pruritus have been reported since VPRIV® was marketed.

Although rarer, hypersensitivity reactions, including symptoms consistent with anaphylaxis, have been reported in patients using VPRIV®. The most frequently reported symptoms of hypersensitivity include nausea, rash, dyspnoea, back pain, chest discomfort or tightness, urticaria, arthralgia, and headache. If the patient experiences a reaction suggestive of hypersensitivity, subsequent testing for velaglycerase alfa antibodies is advised. They should be told to notify the prescribing physician immediately.

In cases of serious infusion-related reactions, including allergic-type hypersensitivity reactions or a suspicion of a lack of effect, the patient should be tested for the presence of antibodies and the results reported to the company.

Takeda utilises the services of an external laboratory to provide free anti-body testing service. To obtain a Covance 'Laboratory Test Requisition Form' please email Labservices@Takeda.com. The Laboratory Test Requisition Form is completed by the HCP and accompanies each specimen sent to an external lab. On this form, the HCP has an opportunity to specify whether the sample was collected due to an 'Adverse Event' (Y/N), if yes providing a description, and also specify if due to 'Lack of Effect' (Y/N).

Provide the homecare nurse /patient caregiver with details on how to manage infusion-related reactions, as further outlined in the Emergency Plan.

It is the responsibility of you, the treating physician, to ensure that the homecare nurse, patient and/or caregiver is adequately trained in preparing, administering and documenting the infusions. They should be aware of risks and trained to act in emergencies adequately including communication of adverse events.

If an IRR occurs, including a hypersensitivity reaction, discontinue the infusion immediately if it occurs during administration. Management of infusion-related reactions should be based on severity of the reaction, such as slowing the infusion rate, treatment with medications such as antihistamines, antipyretics and/or corticosteroids, and/or stopping and resuming treatment with an increased infusion time.

Subsequent infusions may need to occur in hospital. If the patient has had a previous experience with adverse reactions during an infusion, consider prescribing an antihistamine and/or corticosteroid before the infusion to help prevent an allergic reaction from happening.

Emphasise the need for the nurse/patient and caregiver to communicate any events during and after the infusion to you, the treating physician, and to update the Infusion Diary.

In the event of an infusion-related reaction or hypersensitivity, the homecare nurse/caregiver should discontinue the infusion immediately and telephone/contact the treating physician using the information provided in the Infusion Diary. Such events must be documented in the Infusion Diary also. When such a reaction is observed, it is important that antibody blood testing be considered and promptly obtained, as warranted.

The Infusion Diary should include the infusion plan determined by the treating physician including dose and infusion rate as well as a record of the actual infusions administered including health status of the patient before, during and after infusion and measures taken in response to an adverse event.

Detailed description of the administration procedures of VPRIV® and dosage and infusion rate must be included in the Infusion Diary.

Confirm that the homecare nurse/ patient caregiver understand the administrative logistics of home-infusion of VPRIV®:

How to administer VPRIV®

1. Before the homecare nurse or caregiver begins administration, ensure that the preparation area is thoroughly cleaned. The hands should be washed the area kept clean and germ-free while preparing the solution.
2. The appropriate number of vials should be removed from the refrigerator.
3. The homecare nurse/patient caregiver should confirm that each vial is within the expiry date, which is printed on the vial and outer carton (the expiry date refers to the last day of the month indicated). DO NOT use after the expiry date.

How the product should be reconstituted

1. Using the aseptic technique, add Sterile Water for Injection to each vial as shown in the table below:

Solution	400 Units/vial
Volume of Sterile Water for Injection	4.3ml
Concentration after reconstruction	100 Units/ml
Withdrawal volume	4.0ml

2. Upon reconstitution, mix vials by gently rolling between your hands. **DO NOT SHAKE.**
3. Prior to dilution, visually inspect the solution in the vials. The solution should be clear to slightly opalescent and colourless. The solution must not be use if it is discoloured or if foreign particles are present.

PLEASE NOTE: The patient should be present prior to reconstitution, to avoid waste.

How the product should be diluted for intravenous administration

1. Withdraw the calculated volume of VPRIV® from the appropriate number of reconstituted vials. Some solution will remain in the vial (withdrawal volume = 4.0ml for 400 Unit vial).
2. Dilute the total volume of VPRIV® required in 100ml of 0.9% sodium chloride solution for infusion.
3. Mix gently. **DO NOT SHAKE.**

From a microbiological point of view, the medicine should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and must not exceed 24 hours at 2–8 °C. Any unused solution should be disposed of in accordance with local requirements.

Administration

VPRIV® is intended for IV infusion only. VPRIV® should be administered over a period of 60 minutes. VPRIV® should not be infused with other products in the same infusion tubing, as the compatibility in solution with other products has not been evaluated. The diluted solution should be filtered through an in-line low protein-binding 0.22 µm filter during administration.

1. Attach the IV tubing to the diluted bag of VPRIV® and prime the IV tubing with normal saline solution, expelling all air.
2. Set the infusion rate. VPRIV® should be administered over a period of 60 minutes.
3. Obtain IV access and attach the IV giving set. Follow local/facility protocols for IV insertion and infusion of medication.
4. Monitor the infusion regularly for infusion-related reactions.
5. When the infusion is complete, flush the tubing with normal saline to ensure residual VPRIV® remaining in the tubing is infused.
6. Remove the venous access device and discard in an infectious waste disposal container.

The homecare nurse/patient caregiver must document the following information in the infusion diary: date, dose, route of administration, injection site, time infusion started and stopped and patient response to infusion.

Emergency Plan for at Home Infusion of VPRIV® 400 Units powder for solution for infusion

How to recognise hypersensitivity reactions and necessary actions in the event of a serious infusion reaction, hypersensitivity reaction and/or adverse reaction:

[Treating Physician to provide individual instructions for homecare nurse, patient/caregiver below.]

Remind the homecare nurse, patient/caregiver to:

1. Stop the infusion	<input type="checkbox"/>
2. Call the treating physician	<input type="checkbox"/>
3. Follow the individual instruction provided above	<input type="checkbox"/>
4. In case of suspected IRR's or lack of effect, blood sample should be collected for testing of antibodies	<input type="checkbox"/>