## **VYALEV**<sup>™</sup> foscarbidopa/foslevodopa

Injection for subcutaneous use 12 mg/240 mg per mL

For the treatment of motor fluctuations in adults with advanced Parkinson's disease

## **VYALEV User Guide**

for Healthcare Professionals

24-hour continuous treatment for your patients with Parkinson's disease<sup>1</sup>

#### SAFETY CONSIDERATIONS

VYALEV is contraindicated in patients who currently take or have taken (within 2 weeks) a nonselective monoamine oxidase [MAO] inhibitor, as concurrent use can cause hypertension.

Please see additional Important Safety Information throughout. Please see accompanying full Prescribing information.





## Supplies and system components











Medication vial

Rechargeable battery

## Replaced at least once every 3 days<sup>1</sup>



Cannula insertion

device with cannula

Please see System Components Product Information at https://www.devices.abbvie.com. Please see Battery Charger and HCP Pump Instructions for Use at https://www.rxabbvie.com.

### SAFETY CONSIDERATIONS (cont'd)

Replace syringe in 10:35 hh:mm Base 00.34 mL/h

VYALEV is **contraindicated** in patients who currently take or have taken (within 2 weeks) a nonselective monoamine oxidase [MAO] inhibitor, as concurrent use can cause hypertension.

Please see additional Important Safety Information throughout. Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev\_pi.pdf.

## **Continuous** 24-hour dosing

VYALEV is administered over 24 hours via subcutaneous infusion. It replaces all levodopa-containing medications and any catechol-O-methyltransferase (COMT) inhibitors a patient is taking.<sup>1\*</sup>

**VYALEV is dosed in units of milliliters per hour** to establish a base continuous hourly infusion rate. The base **continuous hourly infusion** rate is calculated by determining the total levodopa dosage (current intake of levodopa and COMT inhibitors during waking hours), or TLD, and dividing it by the number of hours the patient is typically awake.<sup>1</sup>

### Base continuous hourly infusion rate examples



\*The maximum recommended daily dosage of VYALEV is 3525 mg of the foslevodopa component (equivalent to approximately 2500 mg levodopa). VYALEV may be administered over the patient's waking hours or may be administered for 24 hours. Prescribing a backup oral carbidopa and levodopa product is recommended in the event that delivery of VYALEV is interrupted, which may result in underdosing.<sup>1</sup>

### **SAFETY CONSIDERATIONS (cont'd)**

VYALEV may cause **sudden falling asleep** during daily activities and somnolence; **hallucinations/ psychosis**; compulsive behavior or **lack of impulse control**; **infusion site reactions and infections**; **withdrawal-emergent hyperpyrexia** and confusion; **dyskinesia**; **cardiovascular ischemic events**; or worsening **glaucoma**.

Please see additional Important Safety Information throughout. Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev\_pi.pdf.

Please see HCP Pump Instructions for Use at https://www.rxabbvie.com/pdf/vyalev\_hcp\_vyafuserpump.pdf.

## **Optional dosing features**





#### High/low continuous hourly infusion rates

Give your patients dosing flexibility throughout their day by allowing them to toggle between different continuous hourly infusion rates.<sup>1</sup>



#### Extra dose

The delivery of an extra dose can be enabled. Extra doses range from 17 mg to 51 mg in levodopa equivalents.<sup>1,2</sup>



#### Loading dose

Use a loading dose when starting VYALEV in an "Off" state or if the patient has not been receiving their base continuous infusion for more than 3 hours.<sup>1</sup>

## **Dose programming**

VYALEV dosing should only be programmed by a healthcare professional. On first use, the clinician must create a PIN to lock the dose settings. The same PIN will be required to access the Clinician Settings to confirm or adjust VYALEV dosing.<sup>2</sup>

When you prescribe VYALEV, the Specialty Pharmacy can program the pump with the dosing information and PIN that you provide on the Enrollment & Prescription Form. If you choose to program the pump yourself, you will be prompted to set a PIN when your patient first brings their pump to your office to start therapy. Once you set your PIN, follow the prompts to program the desired continuous hourly infusion rates as well as extra and loading dose parameters.<sup>2</sup>

The following section explains how to confirm a patient's dose and adjust as needed to help optimize their clinical response.



### **Access the Clinician Settings**



Scroll through the menu and select Clinician Settings.

Patients will not have access to Clinician Settings. They will select Change Rate in the menu to switch between base, low, and high continuous hourly infusion rates.<sup>2</sup>

### **SAFETY CONSIDERATIONS (cont'd)**

VYALEV is **contraindicated** in patients who currently take or have taken (within 2 weeks) a nonselective monoamine oxidase [MAO] inhibitor, as concurrent use can cause hypertension.



## Enter your PIN

Your PIN allows you to access Clinician Settings and change the dose parameters. Do not share the PIN with your patients as it is a safeguard to ensure that they cannot change the settings on their own.<sup>2</sup>



Enter your PIN and press NEXT to access Clinician Settings.

**Note:** If your patient has already initiated treatment, you will need to stop the continuous infusion before you can change the dosing parameters. The pump will prompt you to do this before you enter your PIN. Simply press YES to stop the pump. Wait a few moments until the red square appears in the upper right-hand corner of the screen.<sup>2</sup>



If you forget your PIN, call 1-866-489-2538. VYALEV will continue to be delivered to your patient at the previously programmed rate until you make changes.<sup>2</sup>

Please see additional Important Safety Information throughout. Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev\_pi.pdf. Please see HCP Pump Instructions for Use at https://www.rxabbvie.com/pdf/vyalev hcp vyafuserpump.pdf.



# Confirm or adjust the continuous hourly infusion rates, extra dose, and loading dose volumes



Confirm or adjust the base and optional high/ low continuous hourly infusion rates. Rates range from 0.15 mL/hr to 1.25 mL/hr and can be set in increments of 0.01 mL/hr (equivalent to 1.7 mg/hr of levodopa).<sup>12</sup>

To disable high/low rates, set to same value as the base continuous hourly infusion rate.<sup>2</sup>



Confirm or adjust the optional loading dose volume and lockout time. Loading dose volumes range from 0.1 mL to 3.0 mL in increments of 0.1 mL (equivalent to 17 mg of levodopa), and lockout times range from 3 to 8 hours in increments of 1 hour.<sup>1,2</sup>

To disable the loading dose, set to 0.00.<sup>2</sup>



Confirm or adjust the optional extra dose volume and lockout time. Extra dose volumes range from 0.1 mL to 0.3 mL in increments of 0.05 mL (equivalent to 8.5 mg of levodopa), and lockout times range from 1 to 24 hours in increments of 15 minutes. Lockout times prevent patients from administering another dose until a set time has passed.<sup>12</sup>

To disable the extra dose, set to 0.00.<sup>2</sup>



Always verify that dose parameters have been set correctly. Press BACK to exit Clinician Settings to ensure that patients cannot adjust any of the values.<sup>2</sup>

SAFETY CONSIDERATIONS (cont'd)

VYALEV is **contraindicated** in patients who currently take or have taken (within 2 weeks) a nonselective monoamine oxidase [MAO] inhibitor, as concurrent use can cause hypertension.

Please see additional Important Safety Information throughout. Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev\_pi.pdf.

Please see HCP Pump Instructions for Use at https://www.rxabbvie.com/pdf/vyalev\_hcp\_vyafuserpump.pdf.

## The 5 Ps of administration

Review the 5 Ps (Plan, Prepare, Prime, Place, and Pump) and use them to help set your patients up for successful administration. Refer your patients to the Patient Pump Instructions for Use that they'll receive from the Specialty Pharmacy for additional information.



## Plan it out



Clean your hands and working surface. Then, gather all the supplies.3



### **Prepare the syringe**



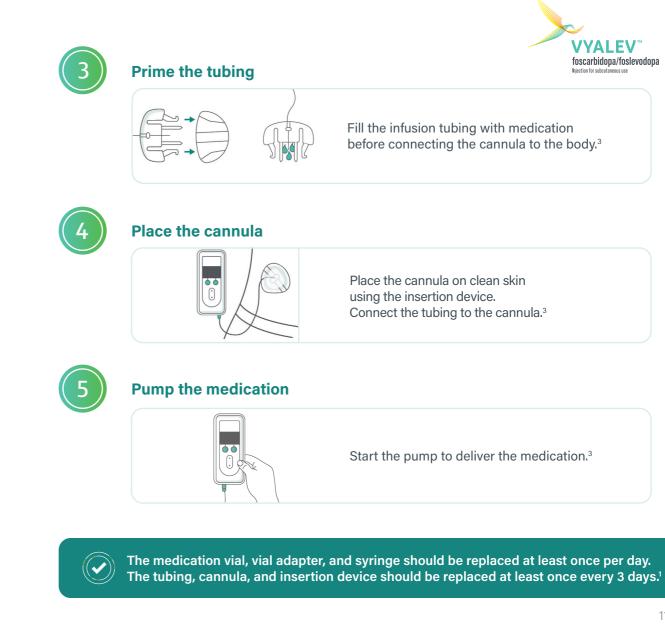
Transfer all the medication from the vial to the syringe using the vial adapter. Attach the tip of the syringe to the tubing and place the full syringe inside the pump.<sup>3</sup>

### SAFETY CONSIDERATIONS (cont'd)

VYALEV may cause sudden falling asleep during daily activities and somnolence; hallucinations/ psychosis; compulsive behavior or lack of impulse control; infusion site reactions and infections; withdrawal-emergent hyperpyrexia and confusion; dyskinesia; cardiovascular ischemic events; or worsening glaucoma.

Please see additional Important Safety Information throughout. Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev pi.pdf.

Please see System Components Product Information at https://www.devices.abbvie.com, Battery Charger Instructions for Use at https://www.rxabbvie.com/pdf/vyalev ifu bcharger.pdf, and HCP Pump Instructions for Use at https://www.rxabbvie.com/pdf/vyalev hcp vyafuserpump.pdf.





#### SAFETY CONSIDERATIONS (cont'd)

The **most common adverse reactions** for VYALEV (VYALEV incidence at least 10% and greater than oral carbidopa/levodopa incidence) were infusion/catheter site reactions, infusion/catheter site infections, hallucinations, and dyskinesia.

Please see additional Important Safety Information throughout. Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev\_pi.pdf.

## Guidance on proper infusion site care

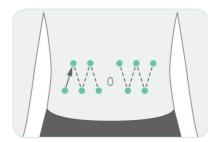
Remind your patients to practice the following clean routine:

Wash (thoroughly) both hands (for 20 seconds) and the area around the infusion site with soap and water.<sup>3,4</sup>

Wipe the infusion-site area with an alcohol pad in an outward spiral motion.<sup>3,5</sup>

Wait at least 60 seconds for the infusion site area to air-dry.<sup>3,5</sup>

## **Choosing and rotating the infusion site**



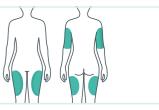
Use a pattern to help keep track of previous sites and choose new ones.

When administering VYALEV, choose an area that is at least 2 inches away from the navel. Consider using transparent film dressing to help secure the cannula to the body.<sup>1</sup>

Advise patients to rotate the infusion site and use a new infusion set at least every 3 days. **Consider rotating the infusion site more frequently** than every third day (eg, daily or every other day) if the patient experiences signs of infection. It is recommended that new infusion sites be at least 1 inch away from sites used within the previous 12 days.<sup>15</sup>

Do not infuse VYALEV into areas where the site is tender, bruised, red, or hard to the touch.<sup>1</sup>

Although the abdomen is the preferred area for the infusion site, it is possible to use other areas (arm or thigh).<sup>1\*</sup>



\*In a phase 1 study, healthy volunteers were administered VYALEV to different subcutaneous sites (ie, abdomen, arm, and thigh) using a 3-way crossover design. Pharmacokinetic (PK) analysis from this study showed that the 3 sites provided comparable carbidopa and levodopa exposure, suggesting that VYALEV absorption is similar at the different subcutaneous sites.<sup>1</sup>

## Get your patients started

Once you've introduced your patient to VYALEV and they've become acquainted with the pump and administration, follow the steps below to get started with treatment initiation.

### **Complete the enrollment form**

- First, use the full Prescribing Information or VYALEV Dosing Calculator (VyalevCalculator.com) to **establish your patient's base continuous hourly infusion rate**
- Second, consider using VYALEV Pump features to provide **patients with dosing flexibility throughout their day** 
  - High and low continuous hourly infusion rates can provide alternative flow rates from base; consider starting with +/- 10% from base infusion rate<sup>5\*</sup>
  - Extra dose, ranging from 17 mg to 51 mg in levodopa equivalents, can be enabled<sup>1,2</sup>
  - Loading dose can be used when starting VYALEV in an "Off" state or if the patient has not been receiving their base continuous infusion for more than 3 hours<sup>1</sup>
- Third, when the Enrollment Form is completed, have your patient sign it and schedule their Start Day appointment in 3-4 weeks

#### **SAFETY CONSIDERATIONS (cont'd)**

VYALEV is **contraindicated** in patients who currently take or have taken (within 2 weeks) a nonselective monoamine oxidase [MAO] inhibitor, as concurrent use can cause hypertension.

Please see additional Important Safety Information throughout. Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev\_pi.pdf.

Please see HCP Pump Instructions for Use at https://www.rxabbvie.com/pdf/vyalev hcp vyafuserpump.pdf.



### Initiate VYALEV treatment on Start Day

- First, review VYALEV administration and infusion site care (including clean routine and site rotation) with your patient
- Second, initiate loading dose (if programmed and patient is in the "Off" state) and base rate
  - Steady-state levodopa was achieved within 2 hours with VYALEV<sup>1</sup>
    Administered as a loading dose followed by continuous infusion in healthy volunteers<sup>1</sup>
  - Consider dose adjustments to base rate based on patient's initial response
  - Consider adjusting high and low rates based on any base rate adjustments

In a clinical trial (n=55), **most patients (78%)** achieved final base rate within 2 or 3 visits (including Start Day)<sup>6</sup>



#### Follow up for VYALEV dose adjustments

When adjusting your patient's dose, consider the following:

**HIGH RATE:** 

Once the base rate is

above the base rate for

optimized, consider setting

the high rate at 5% to 10%

prolonged intense activity.1,5,7\*

#### **BASE RATE:**

If a patient requires multiple (≥2 per day) extra doses on a routine basis, or primarily uses the high rate, consider increasing the base rate.<sup>1</sup>

#### | LOW RATE:

Consider lowering the dosage at night. Consider starting at 10% to 30% below the base rate and adjusting as needed to achieve the desired response.<sup>5\*</sup>

\*Recommendations are based on clinical experience of pivotal study investigators. Real-world infusion rates may differ. Refer to the Prescribing Information for further dosing guidance. Prescribing a backup oral carbidopa and levodopa product is recommended in the event that delivery of VYALEV is interrupted, which may result in underdosing.<sup>1</sup>

#### IMPORTANT SAFETY INFORMATION AND INDICATION

#### **INDICATION**<sup>1</sup>

VYALEV<sup>™</sup> (foscarbidopa/foslevodopa) is indicated for the treatment of motor fluctuations in adults with advanced Parkinson's disease (PD).

#### **IMPORTANT SAFETY INFORMATION**

VYALEV<sup>™</sup> (foscarbidopa/foslevodopa) is **contraindicated** in patients who are currently taking or have taken (within 2 weeks) a **nonselective monoamine oxidase (MAO) inhibitor**, as concurrent use can cause hypertension.

Patients treated with levodopa (the active metabolite of VYALEV) have reported **falling asleep while engaged in activities of daily living**, including the operation of motor vehicles, which sometimes resulted in accidents. Although many of these patients reported somnolence while on levodopa, some perceived that they had no warning signs, such as excessive drowsiness, and believed they were alert immediately prior to the event (sleep attack). Some of these events have been reported more than one year after initiation of treatment. For this reason, prescribers should continually assess VYALEV-treated patients for drowsiness or sleepiness. Advise patients about the potential to develop drowsiness with VYALEV and ask about factors that may increase risk of **somnolence**. Consider discontinuing VYALEV in patients who report significant daytime sleepiness or episodes of falling asleep during activities that require active participation. If VYALEV is continued, patients should be advised not to drive and to avoid other potentially dangerous activities that might result in harm if the patient becomes somnolent. There is insufficient information to establish that dose reduction will eliminate episodes of falling asleep while engaged in activities of daily living.

There is an increased risk for **hallucinations and psychosis** in patients taking VYALEV. Hallucinations associated with levodopa may present shortly after the initiation of therapy and may be responsive to dose reduction of VYALEV or other concomitantly administered medications. Patients with a major psychotic disorder should not be treated with VYALEV.

Patients may experience **intense urges** while on VYALEV. Because patients may not recognize these behaviors as abnormal, it is important for prescribers to ask patients or their caregivers specifically about the development of new or increased gambling urges, sexual urges, uncontrolled spending, binge or compulsive eating, or other urges while on VYALEV. Consider reducing the dose or discontinuing VYALEV if a patient develops such urges.

VYALEV can cause **infusion site reactions and infections**. Various types of reactions at the infusion site have been reported, including erythema, pain, edema, nodules, warmth, swelling, and others. The most frequent infusion site infection reported was cellulitis. If an infection is suspected at the infusion site, the cannula should be removed. In such a case, either a new cannula should be placed at a new infusion site or, in the event of a prolonged interruption, prescribe an oral carbidopa/levodopa product until the patient is able to resume VYALEV.

**Withdrawal-emergent hyperpyrexia and confusion**, a symptom complex that resembles neuroleptic malignant syndrome (characterized by elevated temperature, muscular rigidity, altered consciousness, and autonomic instability), with no other obvious etiology, has been reported in association with rapid dose reduction, withdrawal, or change in dopaminergic therapy. Avoid sudden discontinuation or rapid dose reduction of VYALEV.

VYALEV may cause or exacerbate **dyskinesias**, which may require a dose reduction of VYALEV or other medicines used to treat Parkinson's disease.

**Myocardial infarction and arrhythmia** were reported in patients taking carbidopa/levodopa (the active metabolites of VYALEV). Ask patients about symptoms of ischemic heart disease and arrhythmia, especially those with a history of myocardial infarction or cardiac arrhythmias.

Monitor patients with glaucoma after starting VYALEV as it may cause increased intraocular pressure.

**Drug Interactions**: The use of **nonselective** MAO inhibitors is contraindicated. **Selective** MAO-B inhibitors may be associated with orthostatic hypotension. Concurrent administration with **antihypertensives** can cause symptomatic postural hypotension, which may require a dose adjustment of the antihypertensive. Coadministration with **dopamine D2 antagonists or isoniazid may reduce the** effectiveness of VYALEV.

The most common adverse reactions for VYALEV that occurred in  $\geq$ 3% of patients, and at least 2% difference from oral immediate-release carbidopa/levodopa, were infusion/catheter site reactions, infusion/catheter site infections, hallucinations, dyskinesia, On and Off phenomenon, balance disorder, constipation, peripheral swelling, agitation, insomnia, psychotic disorder, and dyspnea.

VYALEV (foscarbidopa and foslevodopa) injection for subcutaneous use is available in a 120 mg foscarbidopa and 2,400 mg foslevodopa per 10 mL (12 mg foscarbidopa and 240 mg foslevodopa per mL) solution.

Please see accompanying Full Prescribing Information or visit https://www.rxabbvie.com/pdf/vyalev\_pi.pdf.

#### References

1. VYALEV [package insert]. North Chicago, IL: AbbVie Inc. 2. VYALEV HCP Pump Instructions for Use. North Chicago, IL: AbbVie Inc. 3. VYALEV Patient Pump Instructions for Use. North Chicago, IL: AbbVie Inc. 4. Centers for Disease Control and Prevention. When and how to wash your hands. Accessed March 20, 2024. https://www.cdc.gov/handwashing/when-how-handwashing.html 5. Fung VSC, Aldred J, Arroyo MP, et al. Continuous subcutaneous foslevodopa/foscarbidopa infusion for the treatment of motor fluctuations in Parkinson's disease: considerations for initiation and maintenance. *Clin Park Relat Disord*. 2024;10:100239. doi:10.1016/j. prdoa.2024.100239 6. Data on file. AbbVie Inc. ABVRRTI78853. 7. Data on file. AbbVie Inc. ABVRRTI78850.





For additional information about VYALEV, call the 24/7 Hotline at 1-866-489-2538 or scan the QR code to visit VyalevHCP.com.

# **VYALEV**<sup>™</sup> foscarbidopa/foslevodopa Injection for subcutaneous use 12 mg/240 mg per mL

### abbvie

© 2024 AbbVie. All rights reserved. VYALEV™ and its design are trademarks of AbbVie Inc. US-Levcar-220082 10/24 Printed in USA