# Prevymis (letermovir)





NEW PRODUCT SLIDESHOW

MPR

#### Introduction

- Brand name: Prevymis
- Generic name: Letermovir
- Pharmacological class: CMV DNA terminase complex inhibitor
- Strength and Formulation: 240mg, 480mg tabs;
   240mg/12mL, 480mg/24mL; solution for IV infusion after dilution (contains hydroxypropyl betadex)
- Manufacturer: Merck & Co
- How supplied: Tabs—14, 28; Single-dose vial (30mL)—1
- Legal Classification: Rx

#### **PREVYMIS**





#### **Indications**

Prophylaxis of cytomegalovirus (CMV)
infection and disease in adult CMVseropositive recipients of an allogeneic
hematopoietic stem cell transplant (HSCT)

## **Dosage & Administration**

#### Tablets

- Swallow whole
- Start between Days 0 and 28 posttransplantation (before or after engraftment) and continue through Day 100 post-transplant
- 480mg once daily
- Concomitant cyclosporine: 240mg once daily

## **Dosage & Administration**

#### Injection

- Give as IV infusion over 1hr; do not give as IV bolus
- Start between Days 0 and 28 posttransplantation (before or after engraftment) and continue through Day 100 post-transplant
- 480mg once daily
- Concomitant cyclosporine: 240mg once daily
- Switch to oral therapy as soon as able to take oral meds

# Considerations for Special Populations

- Pediatric: <18yrs: not established</p>
- Pregnancy: Insufficient human data to establish drug-associated risk
- Nursing mothers: Unknown whether drug is present, affects human milk production, or has effect on breastfed child
- Renal impairment: CrCl <50mL/min: closely monitor serum creatinine (for IV)
- Hepatic impairment: Severe (Child-Pugh C): not recommended

#### Contraindications

- Concomitant pimozide, ergot alkaloids
- Concomitant pitavastatin, simvastatin when co-administered with cyclosporine

# Warnings/Precautions

 Monitor for CMV reactivation after therapy completion

#### **Interactions**

- See Contraindications
- Specific interactions with cyclosporine: see full labeling
- May be potentiated by OATP1B1/3 inhibitors
- Potentiates CYP3A substrates (eg, midazolam, alfentanil, fentanyl, quinidine), OATP1B1/3 substrates: see full labeling for dose adjustment

#### **Interactions**

- Concomitant amiodarone, phenytoin, voriconazole, sirolimus, tacrolimus, omeprazole, pantoprazole: monitor frequently and adjust dose if necessary
- Monitor INR with warfarin
- Concomitant glyburide, repaglinide, rosiglitazone: monitor glucose levels; avoid repaglinide if co-administered with cyclosporine

#### **Interactions**

- Concomitant rifampin, pitavastatin, simvastatin: not recommended
- Concomitant atorvastatin (max 20mg daily): monitor closely; avoid if coadministered with cyclosporine
- Concomitant fluvastatin, lovastatin, pravastatin, rosuvastatin: monitor and reduce statin dose if necessary; avoid lovastatin if co-administered with cyclosporine

#### **Adverse Reactions**

- Nausea
- Diarrhea
- Vomiting
- Peripheral edema
- Cough
- Headache
- Fatigue
- Abdominal pain
- Lab abnormalities

#### **Mechanism of Action**

- Letermovir inhibits the CMV DNA terminase complex which is required for viral DNA processing and packaging
- Letermovir affects the production of proper unit length genomes and interferes with virion maturation

- Prevymis was evaluated in a Phase 3 multicenter, double-blind, placebocontrolled trial (P001) in adult CMVseropositive recipients of an allogeneic hematopoietic stem cell transplant (HSCT)
  - Patients were randomized to oral or IV Prevymis 480mg once daily or placebo

- CMV DNA monitoring was performed weekly until post-transplant Week 14 and then bi-weekly until post-transplant Week 24
  - Follow-up was conducted through Week 48
- Of the total 565 treated patients, 70 were excluded due to CMV viremia occurring prior to study drug initiation

- The primary efficacy endpoint was the incidence of clinically significant CMV infection through Week 24 post-transplant (prophylaxis failure)
- Clinically significant CMV infection was defined as occurrence of either CMV endorgan disease or initiation of anti-CMV preemptive therapy based on documented CMV viremia

- A smaller proportion of patients failed prophylaxis in the letermovir group vs placebo (38% vs 61%)
- Fewer patients failed therapy due to clinically significant CMV infection by Week 24 in the letermovir group vs placebo (18% vs 42%)

- The rate of study discontinuation before Week 24 was slightly higher in the letermovir group vs placebo (17% vs 16%)
- The stratum-adjusted treatment difference (letermovir – placebo) was -23.5 (95% CI: -32.5, -14.6; P < .0001)</li>
- For more clinical trial data, see full labeling

# **New Product Monograph**

For more information view the product monograph available at:

https://www.empr.com/prevymis/drug/34775/