Prezista is an Antiretroviral Agent, Protease Inhibitor used in the treatment of HIV-1 infections. Prezista binds to the site of HIV-1 protease activity and inhibits cleavage of viral Gag-Pol polyprotein precursors into individual functional proteins required for infectious HIV. This results in the formation of immature, noninfectious viral particles.

**Pre-Authorization Criteria:**
Prezista is used for the treatment of HIV-1 infections in therapy-naïve patients, coadministered with ritonavir. It is recommended (with ritonavir) as a first-line therapy with tenofovir/emtricitabine. Prezista is used in therapy-experienced patients, with or without darunavir resistance-associated substitutions, coadministered with ritonavir. Genotypic testing is recommended in therapy-experienced patients.

VCHCP requires that Prezista be prescribed by an Immunology Clinic physician with current American Academy of HIV Medicine (AAHIVM) certification or a physician boarded in Infectious Disease.

**Dosing: Adult:**
Treatment of HIV infection: Oral:
Therapy-naive: 800 mg once daily; coadministration with ritonavir 100 mg once daily is required. Note: Recommended (with ritonavir) as a first-line therapy with tenofovir/emtricitabine in antiretroviral naïve patients (DHHS, 2013).

Therapy-experienced: Note: Genotypic testing is recommended in therapy experienced patients.  
*With no darunavir resistance-associated substitutions:* 800 mg once daily; coadministration with ritonavir 100 mg once daily is required  
*With ≥1 darunavir resistance-associated substitution:* 600 mg twice daily; coadministration with ritonavir 100 mg twice daily is required  
*If genotypic testing is not possible:* 600 mg twice daily, coadministered with ritonavir 100 mg twice daily

**Dosing: Pediatric:**
Treatment of HIV infection: Children ≥3 years and Adolescents: Oral: Note: Coadministration with ritonavir is required; do not exceed the maximum recommended darunavir adult dose (800 mg to 1200 mg daily depending upon indication). Genotypic testing is recommended in therapy-experienced patients.
Treatment-naive patients or treatment-experienced with no darunavir resistance-associated substitutions:

*Dosing recommendations based on body weight using the oral suspension:*

- ≥10 kg to <11 kg: 350 mg once daily with ritonavir 64 mg once daily
- ≥11 kg to <12 kg: 385 mg once daily with ritonavir 64 mg once daily
- ≥12 kg to <13 kg: 420 mg once daily with ritonavir 80 mg once daily
- ≥13 kg to <14 kg: 455 mg once daily with ritonavir 80 mg once daily
- ≥14 kg to <15 kg: 490 mg once daily with ritonavir 96 mg once daily

*Dosing recommendations based on body weight using the oral solution or tablets:*

- ≥15 kg to <30 kg: 600 mg once daily with ritonavir 100 mg once daily
- ≥30 kg to <40 kg: 675 mg once daily with ritonavir 100 mg once daily
- ≥40 kg: 800 mg once daily with ritonavir 100 mg once daily

Treatment-experienced patients with at ≥1 darunavir resistance-associated substitution:

*Dosing recommendations based on body weight using the oral suspension:*

- ≥10 kg to <11 kg: 200 mg twice daily with ritonavir 32 mg twice daily
- ≥11 kg to <12 kg: 220 mg twice daily with ritonavir 32 mg twice daily
- ≥12 kg to <13 kg: 240 mg twice daily with ritonavir 40 mg twice daily
- ≥13 kg to <14 kg: 260 mg twice daily with ritonavir 40 mg twice daily
- ≥14 kg to <15 kg: 280 mg twice daily with ritonavir 48 mg twice daily

*Dosing recommendations based on body weight using the oral solution or tablets:*

- ≥15 kg to <30 kg: 375 mg twice daily with ritonavir 48 mg twice daily
- ≥30 kg to <40 kg: 450 mg twice daily with ritonavir 60 mg twice daily
- ≥40 kg: 600 mg twice daily with ritonavir 100 mg twice daily

**Administration:**
Coadministration with ritonavir and food is required (bioavailability is increased). Shake suspension prior to each dose; use provided oral dosing syringe to measure dose.

**Dosing: Geriatric:**
Refer to adult dosing.

**Dosing: Renal Impairment:**
- **ClG ≥30 mL/minute:** No dosage adjustment provided in manufacturer's labeling; however, need for adjustment not expected based on pharmacokinetic data.
- **ClG <30 mL/minute:** No dosage adjustment provided in manufacturer's labeling (has not been studied).

**Dosing: Hepatic Impairment:**
- Mild-to-moderate impairment (Child-Pugh class A or B): No dosage adjustment necessary
- Severe impairment (Child-Pugh class C): Use not recommended (contraindicated in Canadian labeling).

**Dosing: Adjustment for Toxicity:**
- Severe rash: Discontinue treatment.
- New or worsening liver dysfunction: Consider interrupting or discontinuing treatment.
Dosage Forms: U.S.:
Excipient information presented when available (limited, particularly for generics); consult specific product labeling.
Suspension, Oral:
Prezista: 100 mg/mL (200 mL) [contains methylparaben sodium; strawberry cream flavor]
Tablet, Oral:
Prezista: 75 mg, 150 mg
Prezista: 400 mg, 600 mg [contains fd&c yellow #6 (sunset yellow)]
Prezista: 800 mg

Generic Equivalent Available: U.S.-No

Exclusions:
Prezista is not to be used as monotherapy. Coadministration with ritonavir is required.

Contraindications:
Coadministration with medications highly dependent upon CYP3A4 for clearance and for which increased levels are associated with serious and/or life-threatening events (includes alfuzosin, cisapride, ergot alkaloids [eg, dihydroergotamine, ergonovine, ergotamine, methylergonovine], lovastatin, midazolam [oral], pimozide, rifampin, sildenafil (when used for pulmonary artery hypertension [eg, Revatio®]), simvastatin, St John's wort, triazolam

Adverse Reactions:
>10%: hypercholesterolemia, increased LDL cholesterol, vomiting, nausea, diarrhea.
Other Serious Less Common Reactions: hepatotoxicity, hypersensitivity reactions, immune reconstitution syndrome, pancreatitis, Stevens-Johnson syndrome, toxic epidermal necrolysis, hyperglycemia, diabetes mellitus, neutropenia, thrombocytopenia, autoimmune disorders, osteonecrosis.
Use in caution in patients with sulfonamide allergy.

References:
3. DHHS Panel on Opportunistic Infections (OI) in HIV-Infected Adults and Adolescents, "Guidelines for Prevention and Treatment of Opportunistic Infections in HIV-Infected Adults and Adolescents: Recommendations from the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), and the HIV Medicine Association (HIVMA) of the Infectious Diseases Society of America (IDSA)," May 7, 2013. Available at http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult_oilvguidelines/adult_oii.pdf
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