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## 5.01.071

Section: Prescription Drugs Effective Date: July 1, 2023

Subsection: Anti-Infective Agents Original Policy Date: December 17, 2021

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Last Review Date: June 15, 2023

## Livtencity

#### **Description**

Livtencity (maribavir)

#### **Background**

Livtencity (maribavir) is an antiviral medication with activity against wild-type human cytomegalovirus (CMV) enzyme pUL97. Enzyme pUL97 is a protein kinase responsible for the phosphorylation of proteins. The activity of Livtencity is due to the parent drug (maribavir), which led to a reduction in CMV replication as quantified by virus yield, DNA hybridization, and plaque reduction assays (1).

#### **Regulatory Status**

FDA-approved indication: Livtencity is a cytomegalovirus (CMV) pUL97 kinase inhibitor indicated for the treatment of adults and pediatric patients (12 years of age and older and weighing at least 35 kg) with post-transplant CMV infection/disease that is refractory to treatment (with or without genotypic resistance) with ganciclovir, valganciclovir, cidofovir or foscarnet.

Livtencity may inhibit the antiviral activity of ganciclovir and valganciclovir due to its mechanism of action, and therefore Livtencity should not be coadministered with ganciclovir or valganciclovir. Virologic failure can occur during or after treatment with Livtencity and CMV DNA levels should be monitored to determine if patient is responding to treatment. Resistance to Livtencity could confer cross-resistance to ganciclovir and valganciclovir.

The safety and effectiveness of Livtencity in pediatric patients less than 12 years of age have not been established (1).

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#### **Related policies**

Prevymis, Valcyte

#### Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Livtencity may be considered **medically necessary** if the conditions indicated below are met.

Livtencity may be considered **investigational** for all other indications.

### **Prior-Approval Requirements**

Age 12 years of age and older

#### **Diagnosis**

Patient must have the following:

- 1. Cytomegalovirus (CMV) infection/disease
  - a. Post-hematopoietic stem cell transplant (HSCT) OR post-solid organ transplant (SOT)

#### **AND ONE** of the following:

- 1. Refractory to treatment with **ONE** of the following:
  - a. Ganciclovir
  - b. Valganciclovir
  - c. Cidofovir
  - d. Foscarnet
- 2. Intolerant or contraindicated to treatment with **ONE** of the following:
  - a. Ganciclovir (e.g., due to bone marrow suppression)
  - b. Valganciclovir (e.g., due to bone marrow suppression)
  - c. Cidofovir (e.g., due to having or being at high risk for nephrotoxicity)
  - d. Foscarnet (e.g., due to having or being at high risk for nephrotoxicity)

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#### AND ALL of the following:

- 1. Patient weighs at least 35 kg (77 lbs)
- 2. **NO** concurrent therapy with ganciclovir or valganciclovir
- 3. Prescriber agrees to monitor CMV DNA levels and check for resistance if patient does not respond to treatment

## Prior-Approval Renewal Requirements

Age 12 years of age and older

#### **Diagnosis**

Patient must have the following:

- 1. Cytomegalovirus (CMV) infection/disease
  - a. Post-hematopoietic stem cell transplant (HSCT) OR post-solid organ transplant (SOT)
  - b. Patient has **NOT** developed resistance to Livtencity (maribavir)

#### **AND ALL** of the following:

- 1. Patient weighs at least 35 kg (77 lbs)
- 2. NO concurrent therapy with ganciclovir or valganciclovir
- 3. Prescriber agrees to monitor CMV DNA levels and check for resistance if patient does not respond to treatment

#### **Policy Guidelines**

#### Pre-PA Allowance

None

### **Prior-Approval Limits**

**Quantity** 672 tablets (quantity sufficient for 8 weeks)

**Duration** 12 weeks\*

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### Prior-Approval Renewal Limits

**Quantity** 672 tablets (quantity sufficient for 8 weeks)

**Duration** 12 weeks\* – **ONE** renewal **ONLY** 

\*Duration is set for 12 weeks to allow time to fill despite the quantity being for 8 weeks of therapy only

#### Rationale

#### **Summary**

Livtencity (maribavir) is an orally bioavailable antiviral medication indicated for the treatment of refractory CMV in patients that have received a solid organ transplant or hematopoietic stem cell transplant. Livtencity targets the pUL97 enzyme and its inhibition leads to reduction in viral load. The pUL97 enzyme is responsible for the antiviral activity of ganciclovir and valganciclovir, and therefore Livtencity should not be coadministered with ganciclovir and valganciclovir. Virologic failure can happen during and after treatment; CMV DNA levels and resistance should be monitored during treatment. The safety and effectiveness of Livtencity in pediatric patients less than 12 years of age have not been established (1).

Prior approval is required to ensure the safe, clinically appropriate, and cost-effective use of Livtencity while maintaining optimal therapeutic outcomes.

#### References

1. Livtencity [package insert]. Lexington, MA: Takeda Pharmaceuticals U.S.A., Inc.; September 2022.

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<sup>\*</sup>Duration is set for 12 weeks to allow time to fill despite the quantity being for 8 weeks of therapy only

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December 2021 Addition to PA

March 2022 Annual review. Changed PA duration to 12 weeks from 8 weeks to allow

time for patient to fill. Per SME: Added option to be intolerant or contraindicated to ganciclovir, valganciclovir, cidofovir, or foscarnet;

Added quantity limit of 672 tablets for 8 weeks.

June 2023 Annual review and reference update. Changed policy number to 5.01.071

### Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on June 15, 2023 and is effective on July 1, 2023.