



**If Hepatorenal Syndrome (HRS) with rapid reduction in kidney function is confirmed,**

**REVERSING IT MAY BE POSSIBLE**

Actor Portrayal

#### **INDICATION AND LIMITATION OF USE**

TERLIVAZ<sup>®</sup> is indicated to improve kidney function in adults with hepatorenal syndrome with rapid reduction in kidney function.

- Patients with a serum creatinine >5 mg/dL are unlikely to experience benefit.

#### **SELECT IMPORTANT SAFETY INFORMATION**

##### **WARNING: SERIOUS OR FATAL RESPIRATORY FAILURE**

- TERLIVAZ may cause serious or fatal respiratory failure. Patients with volume overload or with acute-on-chronic liver failure (ACLF) Grade 3 are at increased risk. Assess oxygenation saturation (e.g., SpO<sub>2</sub>) before initiating TERLIVAZ.
- Do not initiate TERLIVAZ in patients experiencing hypoxia (e.g., SpO<sub>2</sub> <90%) until oxygenation levels improve. Monitor patients for hypoxia using continuous pulse oximetry during treatment and discontinue TERLIVAZ if SpO<sub>2</sub> decreases below 90%.

**Please see additional Important Safety Information throughout and full Prescribing Information, including Boxed Warning.**



## ANTHONY, 57

**Terlivaz**<sup>®</sup>  
terlipressin for injection



### SYMPTOMS

Presents with marked abdominal distension, mild confusion, and depression



### SOCIAL HISTORY

Former moderate alcohol consumption (~5 drinks/week for the last ~30 years)

This hypothetical patient is provided for general medical education purposes only and is not intended as medical practice guidance. You are advised to exercise your own medical judgment when making individual patient treatment decisions.



### COMORBIDITIES

- HCV-related cirrhosis
- Ascites
- Hypertension
- T2DM
- Mild asthma
- Currently on waitlist for a liver transplant<sup>a</sup>



### CONCOMITANT MEDICATIONS

- Furosemide
- Spironolactone
- Metoprolol
- Semaglutide
- Levalbuterol

### KEY CLINICAL ASSESSMENT AND LAB RESULTS

ACLF <sup>b</sup>	Grade 2
MELD <sup>c</sup>	29
Total Bilirubin	12.4 mg/dL
SCr	2.0 mg/dL
HE	Grade 1
INR	1.7
MAP	68 mmHg
SpO <sub>2</sub>	96% on room air
FiO <sub>2</sub>	0.21
SpO <sub>2</sub> / FiO <sub>2</sub>	457

Baseline SCr value obtained from prior weekly lab testing: 0.9 mg/dL

ACLF, acute-on-chronic liver failure; FiO<sub>2</sub>, fraction of inspired oxygen; HCV, hepatitis C virus; HE, hepatic encephalopathy; INR, international normalized ratio; MAP, mean arterial pressure; MELD, model for end-stage liver disease; SCr, serum creatinine; SpO<sub>2</sub>, oxygen saturation; T2DM, type 2 diabetes mellitus.

<sup>a</sup>TERLIVAZ-related adverse reactions (respiratory failure, ischemia) may make a patient ineligible for liver transplantation, if listed. For patients with high prioritization for liver transplantation (e.g., MELD  $\geq$ 35), the benefits of TERLIVAZ may not outweigh its risks.<sup>1</sup>

<sup>b</sup>Calculated based on the Chronic Liver Failure-Sequential Organ Failure Assessment (CLIF-SOFA) scoring system.<sup>2</sup>

<sup>c</sup>Calculated based on the INR, and serum bilirubin and creatinine levels.

## SELECT IMPORTANT SAFETY INFORMATION

### Contraindications

TERLIVAZ is contraindicated:

- In patients experiencing hypoxia or worsening respiratory symptoms.
- In patients with ongoing coronary, peripheral, or mesenteric ischemia.

Please see additional Important Safety Information throughout and full [Prescribing Information](#), including [Boxed Warning](#).



# Confirm if TERLIVAZ®, the first and only FDA-approved treatment for adult HRS patients with rapid reduction in kidney function, is appropriate<sup>1</sup>



## Using the AASLD diagnostic algorithm, Anthony was diagnosed with HRS based on<sup>3</sup>:

- An acute rise in SCr<sup>a</sup>
- Clinical assessments, including urine findings, that rule out other causes of kidney dysfunction such as ATN, AIN, UTI, and UTO
- A Stage 2 AKI determination (2-fold to 3-fold increase in SCr from baseline)
- No improvement in SCr level following 2-day diuretic withdrawal and albumin challenge (1 g/kg body weight per day)
- Presence of cirrhosis with ascites
- Absence of shock
- No recent or current use of nephrotoxic medications
- Absence of parenchymal kidney disease

## BASED ON AASLD GUIDANCE FOR TREATING HRS, TERLIPRESSIN + ALBUMIN IS RECOMMENDED<sup>3</sup>

## Anthony's HCP thought he was an appropriate HRS patient for TERLIVAZ treatment because he has<sup>1</sup>:

- ✓ No signs of hypoxia or worsening respiratory symptoms<sup>b</sup>
- ✓ No signs of intravascular volume overload<sup>c</sup>
- ✓ No coronary, peripheral, or mesenteric ischemia
- ✓ ACLF Grade <3
- ✓ SCr ≤5 mg/dL<sup>d</sup>

This hypothetical patient is provided for general medical education purposes only and is not intended as medical practice guidance. You are advised to exercise your own medical judgment when making individual patient treatment decisions.

AASLD, American Association for the Study of Liver Diseases; AIN, acute interstitial nephritis; AKI, acute kidney injury; ATN, acute tubular necrosis; UTI, urinary tract infection; UTO, urinary tract obstruction.

<sup>a</sup>Defined as an increase ≥0.3 mg/dL from baseline within 48 hours or ≥50% increase known or presumed to have occurred within the preceding 7 days.<sup>3</sup>

<sup>b</sup>Do not initiate TERLIVAZ in patients experiencing hypoxia (e.g., SpO<sub>2</sub> <90%) until oxygenation levels improve.<sup>1</sup>

<sup>c</sup>Manage intravascular volume overload by reducing or discontinuing the administration of albumin and/or other fluids and through judicious use of diuretics.<sup>1</sup>

<sup>d</sup>Patients with SCr >5 mg/dL are unlikely to experience benefit.<sup>1</sup>

## SELECT IMPORTANT SAFETY INFORMATION

### Warnings and Precautions

• **Serious or Fatal Respiratory Failure:** Obtain baseline oxygen saturation and do not initiate TERLIVAZ in hypoxic patients. Monitor patients for changes in respiratory status using continuous pulse oximetry and regular clinical assessments. Discontinue TERLIVAZ in patients experiencing hypoxia or increased respiratory symptoms.

Manage intravascular volume overload by reducing or discontinuing the administration of albumin and/or other fluids and through judicious use of diuretics. Temporarily interrupt, reduce, or discontinue TERLIVAZ treatment until patient volume status improves. Avoid use in patients with ACLF Grade 3 because they are at significant risk for respiratory failure.

**Please see additional Important Safety Information throughout and full [Prescribing Information](#), including [Boxed Warning](#).**

# Earlier diagnosis and treatment may lead to better outcomes.<sup>4,5</sup>

**REVIEW AASLD GUIDANCE<sup>3</sup>  
AT [TERLIVAZ.COM](https://terliva.com) TO IDENTIFY HRS PATIENTS  
AND TREATMENT RECOMMENDATIONS.**

## SELECT IMPORTANT SAFETY INFORMATION

### Warnings and Precautions (cont'd)

- **Ineligibility for Liver Transplant:** TERLIVAZ-related adverse reactions (respiratory failure, ischemia) may make a patient ineligible for liver transplantation, if listed. For patients with high prioritization for liver transplantation (e.g., MELD  $\geq 35$ ), the benefits of TERLIVAZ may not outweigh its risks.
- **Ischemic Events:** TERLIVAZ may cause cardiac, cerebrovascular, peripheral, or mesenteric ischemia. Avoid use of TERLIVAZ in patients with a history of severe cardiovascular conditions or cerebrovascular or ischemic disease. Discontinue TERLIVAZ in patients who experience signs or symptoms suggestive of ischemic adverse reactions.
- **Embryo-Fetal Toxicity:** TERLIVAZ may cause fetal harm when administered to a pregnant woman. If TERLIVAZ is used during pregnancy, the patient should be informed of the potential risk to the fetus.

### Adverse Reactions

- The most common adverse reactions ( $\geq 10\%$ ) include abdominal pain, nausea, respiratory failure, diarrhea, and dyspnea.

**Please see additional Important Safety Information throughout and full [Prescribing Information](#), including Boxed Warning.**

### References:

1. TERLIVAZ® (terlipressin). Prescribing Information. Bridgewater, NJ: Mallinckrodt Hospital Products Inc.
2. Moreau R, Jalan R, Gines P, et al. Acute-on-chronic liver failure is a distinct syndrome that develops in patients with acute decompensation of cirrhosis. *Gastroenterology*. 2013;144(7):1426-1437.e14379.
3. Biggins SW, Angeli P, Garcia-Tsao G, et al. Diagnosis, evaluation, and management of ascites, spontaneous bacterial peritonitis and hepatorenal syndrome: 2021 practice guidance by the American Association for the Study of Liver Diseases. *Hepatology*. 2021;74:1014-1048.
4. Angeli P, Gines P, Wong F, et al. Diagnosis and management of acute kidney injury in patients with cirrhosis: revised consensus recommendations of the International Club of Ascites. *Gut*. 2015;64(4):531-537. doi:10.1136/gutjnl-2014-308874
5. Curry MP, Vargas HE, Befeler AS, Pysopoulos NT, Patwardhan VR, Jamil K. Early treatment with terlipressin in patients with hepatorenal syndrome yields improved clinical outcomes in North American studies. *Hepatal Commun*. 2023;7(1):e1307. doi:10.1097/01.HC9.0000897228.91307.0c



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