

# Consider Utilization of RECARBRIO in OUTPATIENT Settings<sup>1</sup>



## **Indications for RECARBRIO**

RECARBRIO is indicated for the treatment of patients 18 years of age and older with hospital-acquired bacterial pneumonia and ventilator-associated bacterial pneumonia (HABP/VABP), caused by the following susceptible gram-negative microorganisms: Acinetobacter calcoaceticus-baumannii complex, Enterobacter cloacae, Escherichia coli, Haemophilus influenzae, Klebsiella aerogenes, Klebsiella oxytoca, Klebsiella pneumoniae, Pseudomonas aeruginosa and Serratia marcescens.

RECARBRIO is indicated in patients 18 years of age and older who have limited or no alternative treatment options, for the treatment of complicated urinary tract infections (cUTI), including pyelonephritis, caused by the following susceptible gram-negative microorganisms: *Enterobacter cloacae, Escherichia coli, Klebsiella aerogenes, Klebsiella pneumoniae*, and *Pseudomonas aeruginosa*.

RECARBRIO is indicated in patients 18 years of age and older who have limited or no alternative treatment options for the treatment of complicated intra-abdominal infections (cIAI) caused by the following susceptible gram-negative microorganisms: Bacteroides caccae, Bacteroides fragilis, Bacteroides ovatus, Bacteroides stercoris, Bacteroides thetaiotaomicron, Bacteroides uniformis, Bacteroides vulgatus, Citrobacter freundii, Enterobacter cloacae, Escherichia coli, Fusobacterium nucleatum, Klebsiella aerogenes, Klebsiella oxytoca, Klebsiella pneumoniae, Parabacteroides distasonis, and Pseudomonas aeruginosa.

Approval of the cUTI and cIAI indications is based on limited clinical safety and efficacy data for RECARBRIO.

### Usage

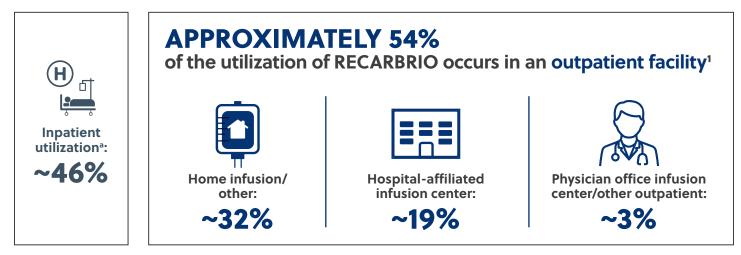
To reduce the development of drug-resistant bacteria and maintain the effectiveness of RECARBRIO and other antibacterial drugs, RECARBRIO should be used only to treat or prevent infections that are proven or strongly suspected to be caused by susceptible bacteria. When culture and susceptibility information are available, they should be considered in selecting or modifying antibacterial therapy. In the absence of such data, local epidemiology and susceptibility patterns may contribute to the empiric selection of therapy.

## **Selected Safety Information for RECARBRIO**

• Hypersensitivity Reactions: RECARBRIO is contraindicated in patients with a history of known severe hypersensitivity (severe systemic allergic reaction such as anaphylaxis) to any component of RECARBRIO. Serious and occasionally fatal hypersensitivity (anaphylactic) reactions have been reported in patients receiving therapy with beta-lactams. Before initiating therapy with RECARBRIO, careful inquiry should be made concerning previous hypersensitivity reactions to carbapenems, penicillins, cephalosporins, other beta-lactams, and other allergens. If a hypersensitivity reaction to RECARBRIO occurs, discontinue the therapy immediately.

Selected Safety Information for RECARBRIO continues on page 2.

## Utilization of RECARBRIO<sup>™</sup> (imipenem, cilastatin, and relebactam) in inpatient and outpatient treatment settings<sup>1</sup>



<sup>a</sup>Total inpatient health care facilities consisted of hospital inpatient, long-term acute care, and nursing homes.<sup>1</sup>

## Infusion time is an important consideration when selecting an antimicrobial for outpatient use<sup>2</sup>

### Selected Safety Information for RECARBRIO (continued)

• Seizures and Other Central Nervous System (CNS) Adverse Reactions: CNS adverse reactions, such as seizures, confusional states, and myoclonic activity, have been reported during treatment with imipenem/cilastatin, a component of RECARBRIO, especially when recommended dosages of imipenem were exceeded. These have been reported most commonly in patients with CNS disorders (eg, brain lesions or history of seizures) and/or compromised renal function.

Anticonvulsant therapy should be continued in patients with known seizure disorders. If CNS adverse reactions including seizures occur, patients should undergo a neurological evaluation to determine whether RECARBRIO should be discontinued.

- Increased Seizure Potential Due to Interaction with Valproic Acid: Concomitant use of RECARBRIO, with valproic acid or divalproex sodium may increase the risk of breakthrough seizures. Avoid concomitant use of RECARBRIO with valproic acid or divalproex sodium or consider alternative antibacterial drugs other than carbapenems.
- Clostridioides difficile-Associated Diarrhea (CDAD) has been reported with use of nearly all antibacterial agents, including RECARBRIO, and may range in severity from mild diarrhea to fatal colitis. Careful medical history is necessary since CDAD has been reported to occur over two months after the administration of antibacterial agents. If CDAD is suspected or confirmed, ongoing antibacterial drug use not directed against *C difficile* may need to be discontinued.
- **Development of Drug-Resistant Bacteria:** Prescribing RECARBRIO in the absence of a proven or strongly suspected bacterial infection or prophylactic indication is unlikely to provide benefit to the patient and increases the risk of the development of drug-resistant bacteria.

Selected Safety Information for RECARBRIO continues on page 3.

## Dosing: RECARBRIO<sup>™</sup> (imipenem, cilastatin, and relebactam) is infused over a 30-minute infusion time

#### **Dosing Regimen**

Administer RECARBRIO 1.25 grams (imipenem 500 mg, cilastatin 500 mg, relebactam 250 mg) by intravenous (IV) infusion over 30 minutes every 6 hours in patients 18 years of age and older with creatinine clearance (CLcr) 90 mL/min or greater. The recommended duration of treatment is 4 days to 14 days, guided by the severity and location of infection, as well as clinical response. Patients with CLcr less than 15 mL/min should not receive RECARBRIO unless hemodialysis is instituted within 48 hours. For patients with fluctuating renal function, CLcr should be monitored.

Estimated CLcr <sup>a</sup> (mL/min)	Recommended Dosage of RECARBRIO (imipenem/cilastatin and relebactam) (mg)	Infusion Time	Dosing Interval
60 to 89	1 gram (imipenem 400 mg, cilastatin 400 mg, and relebactam 200 mg)	30 min	Every 6 hours
30 to 59	0.75 grams (imipenem 300 mg, cilastatin 300 mg, and relebactam 150 mg)	30 min	Every 6 hours
15 to 29	0.5 grams (imipenem 200 mg, cilastatin 200 mg, and relebactam 100 mg)	30 min	Every 6 hours
ESRD on hemodialysis <sup>ь</sup>	0.5 grams (imipenem 200 mg, cilastatin 200 mg, and relebactam 100 mg)	30 min	Every 6 hours

#### Dosage of RECARBRIO for adult patients with renal impairment

<sup>a</sup>CLcr calculated using the Cockcroft-Gault formula.

<sup>b</sup>Administration should be timed to follow hemodialysis.

RECARBRIO is provided as a single vial in a fixed-dose combination; the dose for each component will be adjusted equally during preparation.

#### Storage of constituted solution

RECARBRIO, as supplied in single-dose glass vials upon constitution with the appropriate diluent and following further dilution in the infusion bag, maintains satisfactory potency for at least 2 hours at room temperature (up to 30°C) or for at least 24 hours under refrigeration at 2°C to 8°C (36°F to 46°F). Do not freeze solutions of RECARBRIO.

cIAI, complicated intra-abdominal infection; CLcr, creatinine clearance; cUTI, complicated urinary tract infection; ESRD, end-stage renal disease; HABP, hospital-acquired bacterial pneumonia; VABP, ventilator-associated bacterial pneumonia.

#### See Prescribing Information for detailed dosing and administration.

### Selected Safety Information for RECARBRIO (continued)

• Adverse Reactions: The most frequently reported adverse reactions occurring in ≥5% of HABP/VABP patients treated with RECARBRIO were aspartate aminotransferase increased (11.7%), anemia (10.5%), alanine aminotransferase increased (9.8%), diarrhea (7.9%), hypokalemia (7.9%), and hyponatremia (6.4%). The most frequently reported adverse reactions occurring in ≥2% of cUTI and cIAI patients treated with RECARBRIO were diarrhea (6%), nausea (6%), headache (4%), vomiting (3%), alanine aminotransferase increased (3%), aspartate aminotransferase increased (3%), phlebitis/infusion site reactions (2%), pyrexia (2%), and hypertension (2%).

#### Before prescribing RECARBRIO, please read the Prescribing Information.

#### **References:**

1. Data available on request from Merck Professional Services-DAP, WP1-27, PO Box 4, West Point, PA 19486-0004. Please specify information package US-TIX-00832. 2. Norris AH, Shrestha NK, Allison GM, et al. 2018 Infectious Diseases Society of America clinical practice guideline for the management of outpatient parenteral antimicrobial therapy. *Clin Infect Dis.* 2019;68(1):e1-e35. doi:10.1093/cid/ciy745