

## **SBAR CEFTAZIDIME-AVIBACTAM**

### **Medicine Name**

**Ceftazidime–Avibactam 2g/0.5g**

### **Background**

Ceftazidime-Avibactam has not been submitted to the SMC and therefore is not recommended for use in NHS Scotland (SMC 1307/18).

In September 2019 the Area Drug and Therapeutics Committee (ADTC) approved an SBAR from the Antimicrobial Management Team requesting authorisation for use of Ceftazidime-Avibactam in Lanarkshire.

Ceftazidime-Avibactam is an ALERT antibiotic and should only be prescribed within the NHS Lanarkshire ALERT process on the recommendation of an infection specialist. The prescribing clinician is required to complete a retrospective IPTR Form.

To ensure that there is no delay in commencing effective treatment in a patient identified as having a resistant infection that requires urgent treatment with Ceftazidime-Avibactam, NHS Lanarkshire holds a small resting stock of Ceftazidime-Avibactam at each acute site in the drug emergency cupboards and pharmacy.

### **Indications for its use**

Ceftazidime-Avibactam is an antibiotic made up of an established third-generation Cephalosporin and Avibactam (a novel beta-lactamase inhibitor). The combination of both agents allows this drug to retain efficacy against a number of aerobic Gram negative organisms, including some but not all CPEs, and *Pseudomonas* spp.<sup>3</sup>

Ceftazidime-Avibactam is indicated for the treatment of the following infections:

- Complicated intra-abdominal infection (cIAI)
- Complicated urinary tract infection, including pyelonephritis (cUTI)
- Hospital-acquired pneumonia, including ventilator-associated pneumonia
- Infections due to aerobic Gram negative organisms in adult patients with limited treatment options<sup>3</sup>

### **Contraindications**

- Do not use in patient with cephalosporin hypersensitivity
- Do not use in patient with immediate hypersensitivity to Penicillins/Beta-Lactams
- Use with caution in patients with sensitivity to Penicillins/Beta-Lactams

## **Dosing**

Recommended dosing, for all above indications, is Ceftazidime/Avibactam 2g/0.5g every 8 hours, for all adult patients with CrCl  $\geq$  51 ml/min.

The table below, from the Summary of Product Characteristics, gives dosing information for patients with CrCl <50 ml/min.

Estimated CrCL (mL/min)	Dose regimen <sup>2</sup>	Frequency	Infusion time
31-50	1 g/0.25 g	Every 8 hours	2 hours
16-30	0.75 g/0.1875 g	Every 12 hours	2 hours
6-15	0.75 g/0.1875 g	Every 24 hours	2 hours
ESRD including on haemodialysis <sup>3</sup>	0.75 g/0.1875 g	Every 48 hours	2 hours

No dosage adjustment is required in elderly patients, nor in patients with hepatic impairment.

**See Summary of Product Characteristics (SPC Ceftazidime/Avibactam)**

## **Use in NHS Lanarkshire**

In NHS Lanarkshire it is anticipated that Ceftazidime-Avibactam will be used only for licensed indications, and only when there is known susceptibility to this antibiotic, either from current or recent previous samples, and no known suitable alternative.

## **Expected duration of treatment**

Each case will require individualised clinical and microbiological assessment. The anticipated duration of treatment with Ceftazidime-Avibactam ranges from 5-14 days. Daily review of appropriateness of Ceftazidime-Avibactam is expected, along with regular infection specialist review.

## **Actions for Clinical Teams**

- 1. Only prescribe Ceftazidime- Avibactam on the advice of an infection specialist.**
- 2. Complete the ALERT request form and send it to pharmacy.**
- 3. Obtain a supply of Ceftazidime- Avibactam from pharmacy 9-5 or the emergency cupboard OOH.**
- 4. Consultant with clinical responsibility for patient to complete IPTR paperwork and forward this to Medical Director, for retrospective approval.**

**Approved by AMC: October 2019; Approved by ADTC: November 2019; Review by November 2022**

