

## Who can administer

May be administered by registered competent doctor or nurse/midwife

## Important information

- **Confusion and medication errors have occurred** because of the different expression of dose in the European and the USA markets: **take GREAT care if using USA references** (in USA- doses are generally expressed based on trimethoprim component only- rather than on the combination of trimethoprim/sulfamethoxazole)
- Ensure **high doses used for PJP (PCP)** infection -see below
- **High doses** require **large volume** infusions - read "Methods of intravenous administration" carefully
- Monitoring requirements -see overleaf
- See under 'Dose' for adjustments required in **renal** impairment
- Can cause rare but **serious skin adverse effects**, e.g. Stevens-Johnson syndrome, and other adverse effects such as **blood dyscrasias**, especially in elderly patients
- This medicine may cause venous irritation and tissue damage in cases of **extravasation**.
- For Y-site compatibility [see below](#)

## Available preparations

Septrin 480mg per 5ml ampoule

## Reconstitution

Already in solution

**Draw up using a 5 micron filter needle**

**Dilute further prior to administration**

## Infusion fluids

**Glucose 5% must be used for all fluid restricted patients under (a) below**

Sodium chloride 0.9% can be used if using dilution specified under (b) below

## Methods of intravenous administration

**Intermittent intravenous infusion (using an electronically- controlled infusion device)**

**a: Fluid restricted e.g. PJP treatment (ref 1)**

- To avoid crystallisation **each 1ml** of injection solution (480mg/5ml) **MUST** be diluted to a **minimum of 15ml** Glucose 5% **ONLY**
- Administer required dose over 60 minutes (reduced stability so shorter infusion time needed)
- **Examples given in table below**
- Check for haze or precipitation **during preparation or administration**- discard if present

Dose	Minimum volume of Glucose 5% to use
480mg	75ml
960mg	150ml
1200mg	187.5ml
1440mg	225ml
1680mg	262.5ml
1920mg	300ml
2160mg	337.5ml
2400mg	375ml
2640mg	412.5ml
2880mg	450ml
3120mg	487.5ml
3360mg	525ml
3600mg	562.5ml

Round diluent volume up to nearest volume for other doses. e.g. for a dose of 2500mg- administer in a minimum volume of 412.5ml

#### **b: If not fluid restricted - (non PJP treatment)**

- Each ml of injection solution to be added to 25ml infusion solution
- Add 5ml solution (480mg) to 125ml infusion solution
- Add 10ml solution (960mg) to 250ml infusion solution
- Add 15ml solution (1440mg) to 375ml infusion solution (round to 500ml for convenience)
- Administer required dose over 60 to 90 minutes

#### **c: Central line** <sup>(ref 1)</sup>

- Anecdotal evidence suggests that as a **last resort**, cotrimoxazole may be administered undiluted as an infusion via a central line, over 90 to 120 minutes (unlicensed, ref 1)

Should haze or precipitation appear in the solution at any time before or during an infusion, the mixture should be discarded.

## Dose in adults

**IMPORTANT: Doses below refer to the combination of sulfamethoxazole and trimethoprim-** take care if using references that are basing doses on trimethoprim component alone (typically USA references)

#### **PJP (PCP) treatment**

- **Discussion with Micro/ID is recommended**
- Give 120mg/kg/day divided into a 6 to 8 hourly dosing regimen for 14 days (non HIV), or 21 days (HIV) <sup>(ref 2)</sup>
  - e.g. 30mg/kg every 6 hours
  - For a 70kg patient:  $70 \times 120 = 8,400\text{mg}$  daily, dosing regimen would be 2,100mg every 6 hours (round dose to nearest 480mg=1920mg)
- In severe disease consider oral switch at same dose when clinically improving.

- In mild to moderate disease consider oral route from outset.

### Stenotrophomonas maltophilia

- Consult with Micro/ID

### Other non-PJP (PCP) infections

- Give 960mg to 1440mg every twelve hours depending on severity of infection

### Patients who are nil by mouth <sup>(ref 2)</sup>

- The same dose can be given by the IV route as the oral route e.g. for PJP **prophylaxis** 960mg bd three times a week can be given IV

### Renal impairment (treatment doses only) <sup>(ref 2)</sup>

- Monitor levels as advised by Micro/ID

eGFR (ml/min/1.73m <sup>2</sup> )	Dose to use (applies to TREATMENT doses only)
Above 30	As in normal renal function
15 to 30	<b>For PJP:</b> give usual dose for three days, then reduce to 30mg/kg twice daily <b>For other indications:</b> give 50% of dose from day 1
Less than 15	<b>Only use if haemodialysis facilities available</b> <b>For PJP:</b> give 50% of dose from day one i.e. 30mg/kg twice daily <b>For other indications:</b> Avoid if possible if levels cannot be monitored (or use 50% of dose if Micro/ID approved)
Renal replacement therapy	Consult pharmacy or specialist literature sources

### Hepatic impairment

- The BNF advises to avoid in severe hepatic impairment

## Monitoring

- Monitor FBC when given long term, or in folate deficient patients, or in elderly patients
- Serum potassium and sodium in patients at risk of hyperkalaemia and hyponatraemia

## Further information

- 480mg = 400mg sulfamethoxazole and 80mg of trimethoprim (doses refer to the combination)
- Ensure **adequate hydration** to prevent crystalluria
- **Glucose 5% is the only suitable infusion fluid for fluid restricted regimens** - for stability reasons
- Search synonym for intranet (Cotrimoxazole)

## Storage

Store below 25°C

## References

SPC September 2021

1: Medusa Injectable medicines guide, downloaded 20/09/2021

2: [GUH Antimicrobial Guidelines 2021](#)

3: Sanford guide to Antimicrobial therapy, accessed online 05/10/21

## Therapeutic classification

Antibiotic