Patient Group Direction (PGD) for supply and/or administration of:

Piperacillin with Tazobactam intravenous infusion

for the treatment of sepsis of unknown origin in the ***Emergency Department at DMH***

Only to be used in line with the approved nurse-led sepsis pathway

This PGD supercedes all previous obsolete versions which should now be taken out of circulation	New PGD
Amendments to clinical & legal content this review:	
Section 1 - Clinical Situation	Not applicable
Section 2 - Description of Treatment	Not applicable
Section 3 - Further Aspects Of Treatment	Not applicable
Section 4 - Characteristics Of Staff	Not applicable

1. CLINICAL SITUATION

Indication

Treatment of sepsis of unknown origin in the emergency department at DMH in line with the nurse-led sepsis pathway.

This PGD aims to facilitate in the delivery of antibiotics within ONE hour of recognition of sepsis as per NICE NG51.

Inclusion Criteria

- Adult patients 18 years of age and over.
- Identified as septic by the Trust Infection and Sepsis Screening Tool.
- Sepsis 6 must be completed by the nurse wishing to administer piperacillin/tazobactam under the PGD.
- Only for treatment of **sepsis of unknown origin**. If there is a clear source of infection then a medical prescriber should treat as per Trust Antibiotic formulary.

Exclusion Criteria

- Children (under age of 18 years).
- Pregnant or breastfeeding.
- Patients who have suffered an allergic reaction to a penicillin or cephalosporin or carbapenem antibiotic previously. Not covered by this PGD and should be referred to a prescriber to review treating with Teicoplanin + Ciprofloxacin + Metronidazole +/- Gentamicin.
- Known MRSA, VRE, ESBL, CPE, MRO colonisation.
- Piperacillin/tazobactam (Tazocin) resistant (or intermediate) organisms in blood cultures, sputum and urine during the previous THREE months
- Patients who meet the criteria for **neutropenic sepsis**, refer urgently to medical staff or separate PGD for use of piperacillin/tazobactam in netropenic sepsis.

Patient Group Direction (PGD) for supply and/or administration of:

Piperacillin with Tazobactam intravenous infusion

for the treatment of sepsis of unknown origin in the ***Emergency Department at DMH***
Only to be used in line with the approved nurse-led sepsis pathway

Action if patient excluded
• URGENT referral to medical staff for assessment and to prescribe medication as appropriate. • Patients previously colonising multi-drug resistant organisms should be discussed urgently with senior or microbiology to guide appropriate treatment as appropriate. • Ensure all actions/decisions are documented.
Action if patient declines treatment
• Urgent referral to medical staff. • Ensure all actions/decisions are documented. • Ensure patient/carer fully understands reasons for administration and consequences of not administering treatment. • Document refusal in patient's notes.

2. DESCRIPTION OF TREATMENT
Name, form & strength of medicine
Piperacillin & Tazobactam 4.5 gram intravenous infusion
Legal classification
POM
Administration details (route / dose / frequency)
Single 4.5g to be administered over 30 minutes via intravenous infusion where possible **after** collecting: • Blood Culture • Urgent Full Blood Count (FBC), Urea & Electrolytes (U&Es), Liver Function Test (LFT), CRP and Lactate/venous blood gas (VBG) If possible (but do not delay treatment to do so) also collect: • Urine for culture – either mid-stream urine (MSU) or catheter specimen of urine (CSU). • Other microbiological samples from likely foci of infection (eg sputum & wound samples where appropriate).
Maximum dose and duration of treatment
Only a **single dose** is to be given under PGD. Further doses must be prescribed by a doctor or non-medical prescriber.

Patient Group Direction (PGD) for supply and/or administration of:

Piperacillin with Tazobactam intravenous infusion
for the treatment of sepsis of unknown origin in the ***Emergency Department at DMH***
Only to be used in line with the approved nurse-led sepsis pathway

Quantity to supply/administer
ONE single dose then referral to medical or non-medical prescriber.
Follow up
• This is a medical emergency and as such a doctor must review the patient within 1 hour of administration of the first dose. • Additional antibiotics may also be required which must only be administered after being prescribed by a doctor or non-medical prescriber.

3. FURTHER ASPECTS OF TREATMENT

Adverse drug reactions

Hypersensitivity, angioedema, dyspepsia, nausea, vomiting, diarrhoea, constipation, headache.

See ***Manufacturers Summary of Product Characteristics*** or current edition of the ***British National Formulary*** for full details of relevant warnings and potential adverse effects.

Most likely adverse outcomes from a single dose of Piperacillin/Tazobactam would be hypersensitivity reactions (urticaria, rash, joint pain) which should be treated according to Trust policy.

Patient advice (verbal & written)

There is no intention to provide specific advice relating to a single dose of intravenous antibiotic.

Reporting procedure of suspected adverse drug reaction(s)

- Report to GP.
- Document in patient record.
- Use the yellow card system to report serious adverse drug reactions directly to the MHRA. Yellow cards are available in the back of the BNF and electronically.

Patient Group Direction (PGD) for supply and/or administration of:

Piperacillin with Tazobactam intravenous infusion
for the treatment of sepsis of unknown origin in the ***Emergency Department at DMH***
Only to be used in line with the approved nurse-led sepsis pathway

Records

Records to be kept in accordance with NMC guidance and CDDFT policy and procedures and to include:

- Patient's name, address, date of birth and GP (if registered).
- Diagnosis.
- Drug name, dose and form supplied.
- Manufacturer of product, batch and expiry date.
- Advice given to patient.
- Member of staff who administered or supplied the medication.
- Details of any adverse drug reaction and actions taken (including documentation in patient's record).
- Referral arrangements including self-care.
- Statement 'Administered or supplied via PGD'.

Reference to National/Local Policies or Guidelines

- Current edition of British National Formulary (BNF).
- Current CDDFT Policy (available on Staff Intranet).
- Current professional body guidelines for use of medicines.
- Electronic Medicines Compendium (eMC).
- National Institute for Health & Clinical Excellence (NICE).

4. CHARACTERISTICS OF STAFF

Qualifications required

- Completion of Trust training course in Sepsis and Delivery of Sepsis Treatment and relevant competencies (Physical assessment skills, Arterial Blood Gas training, Blood Culture training, Theoretical and Scenario based teaching).
- Band 6 nurse or above with 2 years relevant experience.

Additional experience / training required

- Assessed as competent, to initiate treatment, supply and/or administer the medicine to which the PGD relates.
- Training in preparation and administration of intravenous drugs.
- Training on Trust policy to enable addition of the medication to paper drug chart or electronic prescribing template (depending on setting).

Continued training requirements

- Maintains own level of updating and competence.
- If administering medication, updates in anaphylaxis and CPR in accordance with CDDFT policy.

Patient Group Direction (PGD) for supply and/or administration of:

Piperacillin with Tazobactam intravenous infusion

for the treatment of sepsis of unknown origin in the ***Emergency Department at DMH***

Only to be used in line with the approved nurse-led sepsis pathway

This Patient Group Direction must be agreed to and signed by all Healthcare Professionals involved in its use

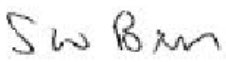
The NHS Trust should hold the original signed copy

The PGD must be easily accessible in the clinical setting

This PGD has been developed and produced / reviewed by:

Name	*Position*	*Date*
Claire Stocks	Early Detection & Resuscitation Lead Nurse	June 2021
Matthew Christie	Pharmacist	
Jane Carr	Matron, Emergency Department	
Kirsty McGee	Acute Intervention/Acute Kidney Injury Service Matron, Sepsis Lead Nurse	
Tim Hussan	Emergency Department Consultant & Sepsis Lead	
Antimicrobial Management Team		

This PGD has been approved for use in County Durham & Darlington NHS Foundation Trust by:

Name	*Position*	*Signed*	*Date*
Lead Pharmacist:			
Stuart Brown	Specialist Pharmacist AMR & OPAT		01.10.2021
Lead Doctor:			
Dr Joanne Malkin	Consultant Microbiologist		01.10.2021
Lead Nurse:			
Noel Scanlon	Executive Director of Nursing		01.10.2021
Clinical Standards & Therapeutics Committee:			
Dr Shafie Kamaruddin	Chair of Clinical Standards & Therapeutics Committee		01.10.2021

Patient Group Direction (PGD) for supply and/or administration of:

Piperacillin with Tazobactam intravenous infusion

for the treatment of sepsis of unknown origin in the ***Emergency Department at DMH***

Only to be used in line with the approved nurse-led sepsis pathway

PGDs DO NOT REMOVE INHERENT PROFESSIONAL OBLIGATIONS OR ACCOUNTABILITY

PGDs should be used in conjunction with reference to national or local policies, guidelines or standard text (eg. Manufacturers Summary of Product Characteristics) and do not replace the need to refer to such sources.

It is the responsibility of each professional to practice only within the bounds of their own competence and in accordance to their own Code of Professional Conduct.

Declaration by Healthcare Professional

- **I have read and understood the Patient Group Direction and agree to supply/administer medicine only in accordance with the PGD**
- **I understand that this PGD can only be used to supply and/or administer the specified medication to an individual patient if they fully meet the inclusion criteria.**
- **I confirm I meet the required staff characteristics specified in this PGD.**
- **I confirm I have read the Trust Patient Group Direction Policy.**

PRINT NAME of Healthcare Professional	***SIGNATURE of Healthcare Professional***	***Date***
Job Title	***Service/Department***	

Declaration by Authorising Manager

- **I confirm the above named Healthcare Professional has been authorised to work under this PGD.**
- **I confirm the Healthcare Professional fulfils the staff characteristics specified in this PGD.**
- **I confirm the Healthcare Professional has been supplied with a full copy of this PGD including clinical content and authorisation.**
- **I confirm I have a copy of the full PGD signed by myself and the Healthcare Professional, which will be retained for future audit.**

PRINT NAME of Authorising Manager	***SIGNATURE of Authorising Manager***	***Date***
Designation	***Service/Department***	