

PATIENT GROUP DIRECTION (PGD)

**Administration of Piperacillin/Tazobactam
By Registered Paediatric Nurse in Paediatric Assessment Unit (PAU)
and on Ward 1 at Queens Hospital Burton**

Documentation details

Reference no:	UHDB168
Version no:	1
Valid from:	21/04/2022
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Change history

Version number	Change details	Date
1	New PGD – proposal accepted at MSG March 2022	21/03/2022

Glossary

Abbreviation	Definition

1. PGD template development (PGD Working Group)

PGD Working Group Membership (minimum requirement of consultant, pharmacist and a registered professional who can work under a PGD (or manages the staff who do). If this is a review of existing PGD, replace previous names with the individuals involved for this version

Name	Designation
Mansoor Ahmed	Consultant Paediatrician (Paed Oncology Lead for QHB)
Angelina Dyché	Antimicrobial Pharmacist , Burton
Julie Vanes	Senior pharmacist, Paediatrics / Medicines Safety, QHB
Caroline Dodd	Senior Sister / Oncology lead nurse, QHB
Dr Anand Deshmukh	Locum Microbiologist

Where an antimicrobial is included, confirm the name, designation and date of the antimicrobial pharmacist who has reviewed this version

Name of antimicrobial pharmacist	Designation	Date Reviewed
Angelina Dyché	Antimicrobial Pharmacist Burton	21/03/2022

2. Organisational authorisations

The PGD is not legally valid until it has had the relevant organisational authorisation.

University Hospitals of Derby & Burton NHS Foundation Trust authorises this PGD for use by the services or providers listed below:

Authorised for use by the following organisation and/or services
Registered Paediatric Nurses working in: <ul style="list-style-type: none"> - Paediatric Assessment Unit (PAU) at Queens Hospital Burton - Ward 1 <p>But <u>only</u> if Dr is unavailable to prescribe.</p>
Limitations to authorisation
<p>Only use this PGD if doctor or non-medical prescriber are unavailable to prescribe.</p>

Organisational Authorisation (legal requirement).			
Role	Name	Sign	Date
Medicines safety officer <i>Pharmacist: Medicines Safety Officer, Chief Pharmacist or assigned deputies)</i>	James Hooley	Signed copy held by Pharmacy	21/04/2022

Additional signatories (required as per legislation and locally agreed policy)			
Role	Name	Sign	Date
Paediatric pharmacist Burton <i>Clinical Pharmacist from PGD working group</i>	Julie Vanes	Signed copy held by Pharmacy	05/04/2022
Paediatric Oncology Lead <i>Doctor</i>	Dr Mansoor Ahmed	Signed copy held by Pharmacy	29/03/2022
Senior sister, Paediatrics <i>Registered Professional representing users of the PGD</i>	Caroline Dodd	Signed copy held by Pharmacy	01/04/2022

Local enquiries regarding the use of this PGD may be directed to UHDB.PGDgovernance@nhs.net

Section 7 provides a registered health professional authorisation sheet. Individual professionals must be authorised by name to work to this PGD.

3. Characteristics of staff

Characteristics of staff Qualifications and professional registration	<ul style="list-style-type: none"> • NMC registered paediatric nurse
Initial training	<ul style="list-style-type: none"> - Completion of all Essential-to-role training as outlined in the UHDB PGD policy including core PGD training. - Individual has read and understood full content of this PGD and signed authorisation (section 6) - Completion of Medicines Management Drug Assessment - Anaphylaxis training as part of yearly PILS - - Infusion Therapy Study day - Sepsis training
Competency assessment	<p>The lead education nurse will act as an assessor, along with any dedicated trained staff who are experienced in this area</p> <p>Once staff have completed all training, they will have their MediTech account adjusted to enable them to record the treatment</p> <p>Staff operating under this PGD are encouraged to review their competency using the NICE Competency Framework for health professionals using patient group directions</p> <p>Individuals operating under this PGD are personally responsible for ensuring they remain up to date with the use of all medicines included in the PGD - if any training needs are identified these should be discussed with the either authorising manager (section 7) or the manager within the PGD working group (section 1) so that further training can be provided as required.</p>
Ongoing training and competency	<p>IV therapy and medicines management will be provided by the professional and practice development team</p> <p>This will be recorded on the learning management system (learning passport) once it has been achieved</p> <p>Competency is to be assessed IV therapy – 3 years Sepsis – one off session</p> <p>Any staff found to be using this PGD incorrectly will need to re-attend the above training</p>
<p><i>The decision to supply any medication rests with the individual registered health professional who must abide by the PGD and any associated organisation policies.</i></p>	

4. Clinical condition or situation to which this PGD applies

Clinical condition or situation to which this PGD applies	<i>Known oncology patients who require immediate (within 1 hour of presentation) antibiotic cover in case of neutropenic sepsis <u>and</u> a Dr is not available to prescribe immediately</i>
Criteria for inclusion	<i>Children aged 2 years and above, who are known to be receiving chemotherapy and whom appear unwell with or without pyrexia</i>
Criteria for exclusion	<ul style="list-style-type: none"> - Known or suspected penicillin allergy (please refer to a prescriber immediately and antibiotic guidelines for further advice) - History of acute severe allergic reaction to any other beta-lactam active substances (e.g cephalosporin, monobactam or carbapenem). - Current intravenous antibiotic treatment - Pregnant patients - Children over the age of 16 years - Recent previous microbiology culture results which show resistance to piperacillin / tazobactam
Cautions including any relevant action to be taken	If source of sepsis is known- please refer to Doctor for system specific antibiotics immediately.
Action to be taken if the patient is excluded	<ul style="list-style-type: none"> • Record reasons for exclusion in patient notes • Advise patient on alternative treatment • Refer to a prescriber immediately
Action to be taken if the patient or carer declines treatment	<ul style="list-style-type: none"> • Document advice given • Advise patient on alternative treatment • Refer to a prescriber immediately
Arrangements for referral for medical advice	Refer to the appropriate medical practitioner in the care pathway

5. Description of treatment

Name, strength & formulation of drug	Piperacillin/tazobactam 4.5gram injection Piperacillin/tazobactam 2.25gram injection
Legal category	Prescription-only medicine (POM).
Route / method of administration	Intravenous infusion over 30 minutes
Indicate any off-label use (if relevant)	Only to be used within the licensed indications
Dose and frequency of administration	<ul style="list-style-type: none"> • Take bloods – FBC, U&Es and blood cultures - prior to giving antibiotics if possible, but do not delay giving antibiotics. • A single STAT dose of 90mg/kg (max 4.5g) should be given by IV infusion within 60minutes of time of arrival in PAU or Ward 1

	<p>Preparation of 4.5 gram vial</p> <ul style="list-style-type: none"> Reconstitute with 17ml of water for injection or sodium chloride 0.9%. This makes 4.5g in 20ml, which is 225mg/ml <p>Preparation of 2.25 gram vial</p> <ul style="list-style-type: none"> Reconstitute with 8.4ml of water for injection or sodium chloride 0.9%. This makes 2.25g in 10ml, which is 225mg/ml <p>Draw up the required dose and dilute further with sodium chloride 0.9% as per Medusa (dilute to between 15mg/ml and 90mg/ml) <i>Example: a dose of 2g (2000mg) must be diluted to at least 22.5ml (giving final concentration of 89mg/ml).</i></p> <p>Infuse over 30 minutes</p>
Duration of treatment	STAT dose only, then review by medical team
Quantity to be supplied (leave blank if PGD is administration ONLY)	n/a
Storage	<p>Stock must be securely stored according to UHDB medicines policy and in conditions in line with SPC as detailed below:</p> <ul style="list-style-type: none"> Store vials in a locked medicine cupboard Once reconstituted, give immediately
Drug interactions	<p>The drug interactions listed in the BNF and SPC are unlikely to be of clinical significance following a stat dose.</p> <p>A detailed list of drug interactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk</p>
Identification & management of adverse reactions	<p><i>Hypersensitivity reactions including anaphylaxis should be treated as an emergency. Stop infusion immediately and instigate symptomatic treatment. Skin reaction may indicate allergy or a more serious skin reaction- see BNF for details</i></p> <p>The following side effects are common:</p> <ul style="list-style-type: none"> Constipation Gastrointestinal discomfort Headache Insomnia <p>A detailed list of adverse reactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk</p>
Management of and reporting procedure for adverse reactions	<ul style="list-style-type: none"> Healthcare professionals and patients/carers are encouraged to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme on: https://yellowcard.mhra.gov.uk Record all adverse drug reactions (ADRs) in the patient's medical record. Serious adverse reactions (moderate harm or above as per NRLS definition) should be reported via trust incident management system (e.g. Datix) to ensure duty of candour and learning from

	<p>harm during clinical use.</p> <ul style="list-style-type: none"> In case of anaphylaxis, follow Trust management guidelines. Adrenaline is available on the resus trolleys located in PAU, Ward 1
Written information to be given to patient or carer	Manufacturers patient information leaflet (PIL)
Patient advice / follow up treatment	Verbal explanation to be given by nursing staff to gain informed consent for administration
Records	<p>Record the following information on ePMA (Electronic Prescribing system) UHDB – MediTech</p> <p>Either the system holding the record, or the healthcare practitioner working under the PGD, must capture/document all of the following on ePMA (Meditech):</p> <ul style="list-style-type: none"> name of individual, address, date of birth and GP with whom the individual is registered (if relevant) name of registered health professional name of medication supplied/administered date of supply/administration dose, form and route of supply/administration quantity supplied/administered batch number and expiry date (if applicable e.g. injections and implants) advice given, including advice given if excluded or declines treatment details of any adverse drug reactions and actions taken Confirm <u>administered</u> via Patient Group Direction (PGD) <p>Records should be signed and dated (or a password controlled e-records). All records should be clear, legible and contemporaneous.</p> <p>If you are not recording in ePMA (or other electronic system which has ability to generate audit reports) then a record of all individuals receiving treatment under this PGD should also be in the clinical area for audit purposes as per UHDB PGD policy.</p>

6. Key references

Key references	<ul style="list-style-type: none"> Electronic Medicines Compendium http://www.medicines.org.uk/piperacillin4g/tazobactam500mg (Bowmed Ibisqus Ltd) accessed online 22/3/21 Electronic BNF https://bnf.nice.org.uk/piperacillin-with-tazobactam accessed online 8/10/2021 NICE Medicines practice guideline “Patient Group Directions” https://www.nice.org.uk/guidance/mpg2 https://medusa.wales.nhs.uk accessed online 8/10/2021 UHDB Febrile Neutropenia Clinical Guideline WC/NP/45P
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7. Registered health professional authorisation sheet

PGD Name [version]: QHB – Paediatrics - Piperacillin/Tazobactam [v1]

PGD ref: UHDB168

Valid from: 21/04/2022

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Before signing check that the document you have read is published on Koha or is an in-date hard-copy with all necessary authorisations signed in section 2. The Name/Version/Ref of the document you have read **MUST** match this authorisation form.

Registered health professional

By signing this patient group direction you are indicating that

- a) You agree to and understand all content and commit to only work within this framework.
- b) You have completed any core PGD e-Learning or training records on My Learning Passport or within your department.
- c) You meet the staff characteristics and have completed any additional learning/competency outlined in Section 3 of this PGD.

Patient group directions do not remove inherent professional obligations or accountability.

It is the responsibility of each professional to practise only within the bounds of their own competence and professional code of conduct.

I confirm that I have read and understood the content of this Patient Group Direction and that I am willing and competent to work to it within my professional code of conduct.

Name	Designation	Signature	Date

Authorising manager / Assessor

I confirm that the registered health professionals named above have declared themselves suitably trained and competent to work under this PGD. I give authorisation on behalf of University Hospitals of Derby & Burton NHS Foundation Trust for the above named health care professionals who have signed the PGD to work under it.

Name	Designation	Signature	Date

Note to authorising manager

Score through unused rows in the list of registered health professionals to prevent additions post managerial authorisation.

This authorisation sheet must be retained by a manager in the clinical department where the PGD is in-use to serve as a record of those registered health professionals authorised to work under this PGD.