University Hospitals of Derby and Burton NHS Foundation Trust

PATIENT GROUP DIRECTION (PGD)

Supply/Administration of Glucose 5%
By Nurses in Chemotherapy Day Units at UHDB

Documentation details

Reference no:	UHDB185
Version no:	1
Valid from:	19/07/2022
Review date:	19/01/2025
Expiry date:	18/07/2025

Change history

Version number	Change details	Date

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
Joanna Beeney	Lead Chemotherapy Nurse
Colin Ward	Directorate/Senior Clinical pharmacist
Ian Amott	ACD Haematologist
Prantik Das	ACD Oncologist
Sue Chambers	DDND

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
n/a	n/a	n/a

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 Nurses working within Chemotherapy Day units within University Hospital of Derby and Burton
Limitations to authorisation
This organisation does not authorise the use of this PGD by Staff not trained in IV therapies or registered with the NMC (Nursing & Midwifery Council)

Organisational Authorisation (legal requirement).			
Role	**Name**	**Sign**	**Date**
Medicines Safety Officer *Pharmacist: Medicines Safety Officer, Chief Pharmacist or assigned deputies)*	**James Hooley**	**Signed copy held in Pharmacy**	**19/07/2022**

Additional signatories (required as per legislation and locally agreed policy)			
Role	**Name**	**Sign**	**Date**
Divisional Pharmacist *Clinical Pharmacist from PGD working group*	**Colin Ward**	**Signed copy held in Pharmacy**	**15/06/2022**
ACD Haematologist	**Ian Amott/Adrian Smith(pp)**	**Signed copy held in Pharmacy**	**18/07/2022**
ACD Oncology *Doctor*	**Prantik Das**	**Signed copy held in Pharmacy**	**11/07/2022**
Lead Chemotherapy Nurse *Registered Professional representing users of the PGD*	**Joanna Beeney**	**Signed copy held in Pharmacy**	**15/06/2022**

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

Qualifications and professional registration	Current NMC registered nurse working within the Chemotherapy Day Unit with UHDB
Initial training	- Completion of all Essential-to-role training as outlined in the UHDB PGD policy. - Individual has read and understood full content of this PGD and signed authorisation (section 7) - Completion of Medicines Management Drug Assessment - Training in the use of PGDs - Infusion Therapy Study Day if administering any IV medicines - Completion of CVAD (Central Venous Access Device) training.
Competency assessment	The nurse must demonstrate an appropriate level of understanding and knowledge with regards to the medication, therapeutic use, side effects, interactions, and storage and handling requirements. · Deemed competent in medicines management scope including any mandatory updates · Deemed competent in intravenous administration scope including any mandatory updates · Deemed competent in Central Venous Devices scope including any mandatory updates Staff operating under this PGD are encouraged to review their competency using the NICE (National Institute for Clinical Excellence) Competency Framework for health professionals using patient group directions. Individuals operating under this PGD are personally responsible for ensuring they remain up to date with the use of all medicines Staff operating under this PGD are encouraged to review their competency using the NICE Competency Framework for health professionals using patient group directions 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 either authorising manager (section 7) or the manager within the PGD working group (section 1) so that further training can be provided as required.
Ongoing training and competency	Annual Medicines Safety Training (essential to role) Review/repeat initial training above when this PGD is revised Up to date mandatory training such as anaphylaxis · Organisation PGD or medication training as required by employing
The decision to supply any medication rests with the individual registered health professional who must abide by the PGD and any associated organisation policies.	

4. Clinical condition or situation to which this PGD applies

Clinical condition or situation to which this PGD applies	Patients receiving SACT (Systemic Anti-Cancer Therapy) regimens that require Glucose 5% to be administered between multiple infusions. Flushing administration line post completion of SACT regimen where Glucose 5% is to be used.
Criteria for inclusion	SACT Regimes where glucose is a suitable flushing agent
Criteria for exclusion	Any regimes where the SACT protocol includes specified flushes are **not** Glucose 5%
Cautions including any relevant action to be taken	Patients where Glucose or fluid volume may need to be restricted: Cardiac failure Hypertension Peripheral or Pulmonary Oedema Renal Impairment Hyponatraemia Diabetic patients Patient with severe malnutrition Thiamine Deficiency Always review recent blood results for results outside of treatment requirements. Consulting team to review if concerns prior to treatment delivery Advise patient to monitor blood sugars if required. Escalate to prescriber as necessary, Should blood sugars fall outside normal range. Review patients past medical history. If patient has any past medical history not previously discussed with consultant team, discuss with consulting team prior to administration Clinical Observations to be taken prior to treatment commencement. To include Respiration rate, Temperature, Blood pressure, Heart rate and oxygen saturation levels. Observations to be escalated to nurse in charge prior to administration Review of cannulation site to be monitored for signs of phlebitis and or extravasation. Follow Trust guidance should either of these occur. Stop using cannula immediately and escalate to Nurse in Charge.
Action to be taken if the patient is excluded	• Record reasons for exclusion in patient notes and advise patient • Discuss with prescriber alternative treatment
Action to be taken if the patient or carer declines treatment	Advise patient of alternative treatment and document advice given • Discussion with the Consultant team or the on-call Doctor responsible for the patient

Arrangements for referral for medical advice	Discussion with the Consultant team or the on-call Doctor responsible for the patient

5. Description of treatment

Name, strength & formulation of drug	Glucose 5% 100mls and 250mls
Legal category	POM (Prescription Only Medicines)
Route / method of administration	Intravenous Infusion
Indicate any off-label use (if relevant)	NA
Dose and frequency of administration	Between SACT infusions – up to 250mls At completion of all SACT infusions – 100mls. To be followed by Sodium Chloride 0.9% Flush at completion of regimen. (See PGD for sodium chloride 0.9%)
Duration of treatment	As per Chemotherapy regime
Quantity to be supplied (leave blank if PGD is administration ONLY)	
Storage	Stock must be securely stored according to UHDB medicines policy and in conditions in line with SPC as detailed below: *Add in SPC specific conditions hers. Available from the electronic Medicines Compendium website:* www.medicines.org.uk
Drug interactions	None
Adverse reactions	Potential adverse reactions are dependent on comorbidities of the patient receiving treatment and their capability of metabolizing glucose and the rate of infusion. Glucose administration can cause: Metabolism and nutrition disorders fluid and electrolyte disturbances including hypokalaemia, hypomagnesaemia and hypophosphatemia, hyperglycaemia, glycosuria. Hypokalaemia may complicate glucose infusions, especially when combined with insulin in the treatment of diabetic ketoacidosis. Oedema Phlebitis Extravasation A detailed list of adverse reactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk
Management of and reporting procedure for adverse reactions	• 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 harm during clinical use.
Written information to be given to patient or carer	Not routinely required. If necessary, give marketing authorisation holder's patient information leaflet (PIL) provided with the product or available via www.medicines.org.uk
Patient advice / follow up treatment	Verbal Advise on why infusion is administered, action of infusion. Inform the individual/carer of side effects and their management. The individual/carer should be advised to seek medical advice in the event of an adverse reaction.
Records	Either the system holding the record, or the healthcare practitioner working under the PGD, must capture/document all the following: • 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 whether supplied and/or administered and that this was done via Patient Group Direction (PGD) Records should be signed and dated (or a password controlled e-records). All records should be clear, legible, and contemporaneous. 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.

6. Key references

Key references	• *Electronic Medicines Compendium http://www.medicines.org.uk/* • *Electronic BNF https://bnf.nice.org.uk/* • *NICE Medicines practice guideline "Patient Group Directions" https://www.nice.org.uk/guidance/mpg2* • *https://medusa.wales.nhs.uk*

7. Registered health professional authorisation sheet

PGD Name [version]: Chemotherapy Day Units – Glucose 5% [v1]
PGD ref: UHDB185

Valid from: 19/07/2022 Expiry date: 18/07/2025

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.