

This Patient Group Direction (PGD) must only be used by registered health professionals who have been named and authorised by their organisation to practice under it. The most recent and in date final signed version of the PGD should be used.

Patient Group Direction

For the administration of 0.9% sodium chloride intravenous infusion solution by Radiographers with current HCPC (Health and Care Professions Council) registration and Registered nurses with a current NMC (Nursing & Midwifery Council) registration.

For patients undergoing Imaging examinations in the Imaging department, BSUHT.

Version number: 3

Change history

Version number	Change details	Date
3	Existing PGD reviewed and transferred onto NICE/BSUH template	Dec 2019
3	Reviewed and approved by PGD group	Dec 2019

PGD development

Name	Job title and organisation	Signature	Date
Lead author	Edward Hussey	Via email	May 2020
Lead doctor	Joon Lee	Via email	May 2020
Representative of other professional group using PGD	Jemma Deane, Lead Superintendent Radiographer	Via email	May 2020
*Review of Version 3			

Organisational authorisations

Brighton & Sussex University Hospitals NHS Trust authorises this PGD for use by the services or providers listed below:
Imaging department BSUH
Limitations to authorisation
Radiographers with current HCPC registration and registered nurses with current NMC only

Name	Signature & Name	Date
PGD GROUP	Joanne Pendlebury	December 2019
Chief Pharmacist	Michael Cross	May 2020
Medicines Governance Group chair	Michael Okorie	May 2020

Local enquiries regarding the use of this PGD may be directed to Bsuh.pgdgroup@nhs.net or PGD group chair.

Appendix 2 provides a practitioner authorisation sheet. Individual practitioners must be authorised by name to work to this PGD.

Training and competency of registered health professionals

	Requirements of registered health professionals working under the PGD
Qualifications and professional registration	<p>Radiographers with current HCPC registration and a minimum of 12 months post qualification clinical experience</p> <p>Registered nurse with a current NMC (Nursing & Midwifery Council) registration and a minimum of 12 months post qualification acute clinical experience</p>
Additional requirements	<p>THE INDIVIDUAL PRACTITIONER MUST BE AUTHORISED BY NAME, UNDER THE CURRENT VERSION OF THIS PGD BEFORE WORKING ACCORDING TO IT.</p> <p>The individual practitioner is required to have a working knowledge of adverse reactions to the medication used with the PGD and how to identify drug interactions.</p>
Initial training	<p>Has undertaken appropriate IV administration training with relevant updates as required by the Brighton and Sussex University Hospitals NHS Trust IV policy and has been assessed as competent in the role.</p> <p>Has undertaken appropriate training for working under patient group directions for administration of contrast media and has been assessed as competent in the role by a consultant radiologist or the author of this PGD.</p> <p>Has undertaken training appropriate to recognise and manage allergic/anaphylactic reactions.</p> <p>Has undertaken appropriate Trust resuscitation training.</p>
Competency assessment	PGD users will be responsible for collecting data and contributing to the audit of their practice.
Continued training requirements	<p>Annual Trust resuscitation and anaphylaxis training update.</p> <p>PGD audit and training session at each renewal period.</p>

Clinical condition

Clinical condition or situation to which this PGD applies	<p>0.9% sodium chloride is used as a contrast bolus chaser to enhance visualisation of vascular anatomy and demonstrate pathology in CT and MRI examinations.</p> <p>Indications for CT and MRI examinations include:</p> <ul style="list-style-type: none"> - Diagnosis or suspicion of cancer - Possible vascular abnormality
Inclusion criteria	<p>In-patient and out-patient adults, 17 years and over.</p> <p>Patent cannula.</p>

Exclusion criteria	Patients 16 years of age and under. There are no absolute contra-indications to the use of sodium chloride 0.9% in the volumes used in this PGD.
Cautions (including any relevant action to be taken)	Nil
Arrangements for referral for medical advice	Refer to Radiologist overseeing examination
Action to be taken if patient excluded	Refer to Radiologist overseeing examination
Action to be taken if patient declines treatment	Refer to Radiologist overseeing examination

Details of the medicine

Name, form and strength of medicine <i>Include ▼ for black triangle medicines</i>	0.9% sodium chloride intravenous infusion solution for injection, Administered via single use pump system or multi-use pump system.
Legal category	<i>POM</i>
Indicate any off-label use (if relevant)	N/A
Route/method of administration	Intravenous via an automatic single or multiple use pump injector. Intravenous via hand injection.
Dose and frequency	One or two administrations (maximum total volume 80mls). Details are listed under protocols for each CT and MRI scanner in the appropriate protocol folder. See Appendix 1 for details. Usually once but can be up to 2 administrations during the examination, for the timing scan and then the actual diagnostic scan.
Quantity to be administered and/or supplied	Administered as part of procedure. See Appendix 1 .
Maximum or minimum treatment period	One or two administrations (maximum total volume 80mls).
Adverse effects	Rarely local pain and swelling may occur associated with the infusion. In the case of extravasation, please refer to the departmental procedure. A detailed list of adverse reactions is available in the SPC, which are available from the electronic Medicines Compendium website: www.medicines.org.uk . BNF/C also has information on adverse effects.
Drug interactions	A detailed list of drug interactions is available in the SPC (summary of

	<p>product which are available from the electronic Medicines Compendium website: www.medicines.org.uk</p> <p>BNF/C also has drug interaction information</p>
Supplies	Protocols for the ordering, storage and handling of medicines should be followed to prevent wastage
Storage	Protocols for the ordering, storage and handling of medicines should be followed
Reporting procedure of adverse reactions	<p>Healthcare professionals and individuals/parents/carers are encouraged to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme on: http://yellowcard.mhra.gov.uk</p> <p>For Black triangle any suspected adverse reactions should be reported via the Yellow Card Scheme.</p>
Special considerations / additional information	N/A
Records to be kept	<ul style="list-style-type: none"> - Patient's name, address, date of birth and hospital number. - Patient's checklist to include positive ID of patient and consent given, radiologist cover, emergency equipment available - Allergy and sensitivity status - The site and size of cannula and whether eventful, or uneventful - Volume administered dose and batch number. - Sodium chloride 0.9% flush <p>A record of all individuals receiving treatment under this PGD should also be kept for audit purposes in accordance with local policy. OR the patients should be identifiable in a timely manner for audit purposes.</p>
Written/verbal information to be given to patient or carer	<p>Ensure written patient information has been given at time of appointment.</p> <p>Verbal advice given with contrast administration.</p> <p>Patient information leaflet (PIL) available:</p> <p>https://www.nhs.uk/medicines/</p>
Follow-up advice to be given to patient or carer	<p>Examinations will be reported by a Consultant Radiologist and a copy of the report sent to the referring clinician.</p> <p>Patient instructed at time of examination to follow up with referring clinician.</p>

Audit

Plan for audit , It is essential for PGD renewal that audits have occurred.	Retrospective audit of compliance with PGD to be completed.
Frequency	At each renewal period
Nominated lead to manage audit	Jemma Deane, Lead Superintendent Radiographer

Key references

Key references	<i>0.9% sodium chloride intravenous infusion solution</i> Summary of Product Characteristics, www.products.mhra.gov.uk
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Appendix 1

CT Examinations with Saline Bolus

Examination	Saline Dose
Cardiac Angiogram	Up to a total of 80mls
CT Venogram Head	Up to a total of 40mls
Other CT Angiograms	Up to a total of 80mls (check individual scanner protocol folder)
CT body with IV contrast scans using multi use pump system	Up to a total of 45mls

MRI Examinations with Saline Bolus

Examination	Saline Dose
All MRI angiograms	Up to a total of 80mls
All MRI Body Procedures	Up to a total of 80mls

Appendix 2 Health professionals' agreement to practise

PGD Title.....

Practitioner, by signing this patient group direction you are indicating that you agree to its contents and that you will work within it.

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 of health professional	Role	Signature	Date

Authorising manager

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

Name	Role	Signature	Date