Standard Operating Procedure for Assistant Practitioners in the CT Scanner to Prepare and Administer Contrast, GTN spray and Hyoscine Butylbromide.

Post holder responsible for Procedural Document	CT Superintendent Radiographer
Author of Standard Operating Procedure	Radiology Governance Lead
Division/ Department responsible for Procedural Document	Clinical Support & Specialist Services
Contact details	
Date of original policy / strategy/ standard operating procedure/ guideline	
Impact Assessment performed	Yes/ **No**
Approving body and date approved	Radiology Governance Group
Review date (and frequency of further reviews)	(every 3 years, 6 months before expiry date).
Expiry date	28.09.2026
Date document becomes live	29.09.23

Please *specify* standard/criterion numbers and tick ✓ other boxes as appropriate

Monitoring Information		**Strategic Directions – Key Milestones**	
Patient Experience		Maintain Operational Service Delivery	√
Assurance Framework	√	Integrated Community Pathways	
Monitor/Finance/Performance		Develop Acute Services	
CQC Fundamental Standards Regulations No:		Delivery of Care Closer to Home	
		Infection Control	
Other *(please specify)*:			
Note: This document has been assessed for any equality, diversity or human rights implications			

SoR note: The advancement of experienced APs in medicine administration must align with the employer's documented policies and procedures for support staff administering medicines and be supplemented by appropriate education, training, and competency development in line with professional body standards.

Full History		Status: Final	
Version	Date	Author (Title not name)	Reason
1.0	Mar 2019	Radiology Governance Lead	Initial version for consultation
1.1	April 2019	Radiology Governance Lead	Amendments made following initial consultation
1.2	Sept 2019	Radiology Governance Lead	Amendments made following Drug and Therapeutics Committee consultation.
2.0	Oct 2019	Radiology Governance Lead	Approved by Radiology Management Group and the Drugs & Therapeutics Committee.
2.1	Sept 2022	Radiology Governance Lead	Reviewed, updated to new Trust format, further amendments made to scope of practice following consultation to accommodate change of practices in the CT department and the addition of EPIC and its use negating PSDs; no changes to the medications however doses added to the table in Appendix D.
3.0	28.09.2023	Radiology Governance Lead	Approved by Radiology Management Group via Q-Pulse

Associated Trust Policies/ Procedural documents:	
Key Words:	Radiology, CT scan, PGD, PSD

In consultation with and date: Clinical lead – Mar 2019 Principal Radiographer – Mar 2019; Dec 2022 Radiologists – Mar 2019 CT Radiographers – Dec Mar; Jan 2023 CT Lead – Mar 2019; Dec 2022 Assistant Practitioners – Mar 2019; Jan 2023 Non-Medical Prescribing Lead – Mar 2019 Drugs & Therapeutics Committee – Apr 2019 Medication Safety & Deputy Chief Pharmacist – Sept 2022	
Contact for Review:	Radiology Governance Lead

CONTENTS

KEY POINTS OF THIS PROCEDURAL DOCUMENT:

Patients undergoing CT scans often need to have Intravenous Contrast administered as part of their examination and this standard operating procedure sets out the procedure to allow Assistant Practitioners to draw up contrast and connect it to the patient in preparation for their scan and to administer pre-loaded syringes for hand injections under the supervision of a Registered Radiographer. It is also necessary for some patients to have Glycerol Trinitrate (GTN) spray administered for Cardiac Scans and Hyoscine Butylbromide for CT Virtual Colonoscopy scans and so they will also be included in this standard operating procedure.

This procedure sets out the process that allows that to happen safely and ensures that the risks to the patient's well-being are minimised.

1. INTRODUCTION

1.1. The Assistant Practitioner (AP) is a non-registered practitioner, who performs protocol-limited clinical tasks under the direction and supervision of the registered Radiographer who has overall responsibility for the "episode of care" (SOR 2012).

1.2. Patients undergoing CT scans often need to have Intravenous Contrast administered as part of their examination and this standard operating procedure sets out the procedure to allow Assistant Practitioners to draw up contrast and connect it to the patient in preparation for their scan and to administer pre-loaded syringes for hand injections under the supervision of a Registered Radiographer. It is also necessary for some patients to have Glycerol Trinitrate (GTN) spray administered for Cardiac Scans and Hyoscine Butylbromide for CT Virtual Colonoscopy scans and they are also included in this standard operating procedure.

1.3. This Standard Operating Procedure (SOP) relates to the Assistant Practitioners in the CT scanning department only.

1.4. Only Assistant Practitioners (CT) that have received the Trust training in Cannulation and have received documented training in the administration of medication training, as outlined in the Medicines Policy for Skilled Non-Registered Staff, may perform this task. Staff undertaking this procedure must be able to demonstrate continued competence as per the organisations policy on assessing and maintaining competence.

1.5. The scope of practice in this standard operating procedure is specific to the Radiology department only and APs moving area will not be able to fulfil the same tasks without additional training and competencies.

1.6. Assistant Practitioners will have completed approved education, training and assessment of competence for the medicines used,including the relevant imaging considerations and parameters, the pharmacology, the administration criteria, risks and associated complications, the legal authorisation under which they work, communication, care and consent of the patient, recognition of contraindications, complications, reactions and extravasating, management of contraindications, complications, reactions and extravasations

1.7. At no time will an AP administer a POM without direct supervision of a radiographer I.e. a CT trained radiographer is immediately available to provide oversight, advice and support

2. PURPOSE

2.1. The Standard Operating Procedure (SOP) has been written to: Enable Assistant Practitioners working in the CT department to prepare and administer contrast, assist the Patient in administering GTN spray and draw up and administer Hyoscine Butylbromide under the supervision of a Registered Radiographer and in accordance with the XXXX University Healthcare NHS Foundation Trust's Medicines Policy for Skilled Not-Registered Staff.

2.2. Implementation of this procedure will ensure that:

- The person preparing and administering the contrast agent, GTN or Hyoscine

Butylbromide is trained and aware of the potential risks to the patient and is able to carry out the task competently and effectively.

- The correct patient is identified for the procedure.
- All contrast, GTN or Hyoscine Butylbromide is checked, prepared and administered safely to the correct patient.
- Contraindications to the use of contrast agents and other medicines will be recognised and acted upon appropriately
- Risks to the patient's well-being are minimised
- Supervision of the task is undertaken by Registered Staff.

3. DEFINITIONS

3.1. **AP –** Assistant Practitioner
3.2. IR(ME)R – Ionising Radiation (Medical Exposures) Regulations 2024
3.3. XXX University Healthcare NHS Foundation Trust
3.4. XXDH – XXX District Hospital
3.5. CT – Computed Tomography
3.6. EPIC – Electronic Patient Information Computer Software
3.7. PSD Patient Specific Direction
3.8. PGD Patient group Direction

4. DUTIES AND RESPONSIBILITIES OF STAFF

4.1 The CT Superintendent Radiographer is responsible for: ensuring that staff are aware of this policy and ensuring adherence. They are also responsible for ensuring that all related Trust procedures such as Hand washing /Patient Identification/ Venepuncture and Cannulation are also observed.

4.2. The Assistant Practitioner is responsible for: ensuring that they work within their scope of practice and follow procedure at all times.

5. PROCEDURE

5.1. Equipment

- Prescription for all POMs required on the Patients' record/order on EPIC written and signed by a Radiologist or Non-Medical Prescriber.
- Trays for giving equipment
- Tourniquet
- Gloves
- Sani-cloth – Disposable Disinfectant Wipes
- Cannula (for CT patients Introcan blue cannula preferable but yellow if difficult to cannulate. For angiograms an introcan pink is required, except for Coronary Angiograms which require a green cannula. Inpatients may have a Venflon pink cannula or blue if difficult to cannulate).
- Sterile Transparent Cannula Dressing
- Durapore
- Appropriate non-injectable bung system extension line primed with 0.9% sodium chloride from the pre-filled syringe and primed of air
- Sharps Bin
- Load the CT injector pump as directed by the Supervising Registered Radiographer (Refer to individual SOP for loading injector pump; Assistant Practitioners should have completed documented training of how to load the injector pump and be assessed as competent prior to undertaking this role):
- Contrast agent – Appropriately loaded into pump injector or use pre-loaded syringe for hand injection. Check name and expiry date with Supervising Registered Radiographer.
- GTN Spray; Check name and expiry date with Supervising Registered Radiographer.
- Hyoscine Butylbromide; Check name and expiry date with Supervising Registered Radiographer.
- Emergency Drugs

- Resuscitation Trolley
- Oxygen
- Suction

5.2. Emergency Equipment

- The following equipment must be in the examination room and must be checked each morning:
- Oxygen – cylinder in date and in working order if no wall supply available
- Oxygen – in working order with tubing and mask attached and ready for use
- Suction - machine in date and in working order if no built-in apparatus available
- Emergency Drugs/anaphylaxis box – all drugs contained within should be in date and checked regularly
- In addition, the Resuscitation Trolleys and Defibrillator in the CT department must be checked daily to ensure that they are in correct working order. All vital equipment must be present and in date. Oxygen cylinders attached to the trolleys must be checked daily to ensure supply.
- Also, the monthly checks of the resuscitation trolley and anaphylaxis box should be done and checklist completed.

5.2.1. **Emergency Drugs**

For the treatment of anaphylaxis should include:

- Adrenaline 1mg/ml (1 in 1000 dilution) for intramuscular administration
- Salbutamol Inhaler

5.3. Patient Group Directions (PGDs) and Patient Prescriptions on EPIC

5.3.1. Assistant Practitioners are not able to work under PGDs as they are not registered professionals and the PGD cannot be delegated to them by the Radiographer.

5.3.2. However, under the Medicines Policy for Skilled Not-Registered Staff the Assistant Practitioners are able to draw up and administer contrast under the PSD or with a prescription from the Medical Practitioner/Radiologist or non-medical prescriber.

5.3.3. With the introduction of EPIC a Consultant (or any prescriber's) order in EPIC is the equivalent of a PSD as it's an instruction to administer to a specific patient.

5.3.4. This would normally appear on the patient's Medication Administration Record (MAR) on EPIC and can be administered with all of the bar codes scanning and safety checks completed.

5.4. Cannulation Process

- Cannulate patient in accordance to the Trust Policy for Cannulation.

5.5. Patients with cannula's in situ

- Cannula must be flushed with prefilled 10mls Sodium Chloride 0.9% to ensure correct position
- If no flow back then the cannula must be flushed by a second person, regardless of how well the cannula is working
- If any doubt after the second person has checked the cannula then the patient should be re-cannulated or have a trial injection with Sodium Chloride 0.9% via the high pressure injector; this should be directed by the supervising radiographer.

- Once happy with the position of the cannula complete the information on the back of the contrast questionnaire about the cannula

5.6. Method for Administering Contrast Media

- Work in line with the trust policy for the Preparation of injectables.
- The type of contrast media to be used will be indicated on the appropriate scan protocol in the CT Protocol Folder and will be documented on the patients CRIS appointment details. This should match the prescribed medicines on EPIC.
- **If there is no specific protocol, prescription or PSD then the Assistant Practitioner should not draw up or administer contrast under any circumstances.**
- The contrast agent should only be administered by the Assistant Practitioner according to the PSD.
- Make sure the appropriate Contrast Administration Form is filled in correctly and that the box is ticked for Contrast administered according to PSD.
- Introduce yourself to the patient by name and professional title.
- Check patient identity (three forms of identification, ID policy) and clinical details.
- Explain the procedure to the patient and gain written consent.
- Using the Contrast Administration Form check the patient has no contraindications to contrast administration and obtain their signature. If the patient has allergies, other contraindications or questions discuss with the Supervising Radiographer before cannulation.
- Ensure that the emergency drugs are in date and present in the room (see Sections 5 & 6 above).
- Draw up the contrast agent to be given into syringes or the CT Injector pump as required (See separate SOP Loading the CT injector pump; Assistant Practitioners should have completed documented training of how to load the injector pump and be assessed as competent prior to undertaking this role)
- Use aseptic non-touch technique when preparing and administering injectable medicines.
- Check the batch number and expiry date of a pre-loaded Saline (Sodium Chloride 0.9%) syringe and place the syringe on the giving tray
- Ask the Supervising Radiographer to check the date and batch number of the contrast agent which has been drawn up and pre-loaded Sodium Chloride 0.9%. Two members of appropriately trained staff including a radiographer must remain in the immediate vicinity whilst the contrast is administered in case of any adverse reaction.
- The batch numbers and expiry dates of both contrast and Sodium Chloride 0.9% must be recorded the contrast details are automatically sent to PACs by the injector and so recorded and stored in PACS; the supervising radiographer must sign the contrast form as the second signatory confirming that this has been checked and recorded.
- Both staff should sign the back of the contrast form (injector and witness) which will then be scanned onto the patient's attendance episode on CRIS.

5.7. Giving the injection.

- Connect the syringe containing the contrast agent to the patient – for CT this is using the Patient Line

- For injections using the pump injector, please refer to the Radiology SOP for loading the CT Injector Pump and connecting it to the patient.

- Inject contrast according to scan protocols
- A test injection of sodium chloride 0.9% is used from the Centargo multi-patient injector which is observed. If a SMART protocol, observation of contrast injection no longer required
- In the event of any adverse reaction - STOP THE INJECTION. Do not remove the cannula. Seek assistance of the Radiologist or ED doctor immediately. Commence emergency care, Implement anaphylaxis / resuscitation procedure if necessary.

5.8. Following the procedure

- Remove the cannula after the defined time for the contrast media used
- Dispose of the cannula according to the waste/sharps policy.
- Apply dry swab to injection site and apply direct pressure for 2-3 minutes.
- Check for signs of inflammation, swelling and bleeding. Record Visual Infusion Phlebitis (VIP) score
- If inflammation and extravasation is suspected then report to the Supervising Radiographer who will follow the radiology departmental Extravasation Procedure and the XXX NHS Trust guidelines on extravasation Further advice can be sought from the Radiologist.
- If bleeding continues, apply pressure for a further 2-3 mins
- Once the bleeding has stopped secure the swab with Durapore. Remember to check that the patient is not allergic to this.
- Ensure all waste is disposed of in the correct provided containers and all sharps bin lids are left half closed.
- Provide the CT patient with post contrast leaflet, 'Information sheet for patients who have had an intravenous injection of contrast medium'.
- Ask the patient to remain in the department for 30 minutes and in the hospital for a further 30 minutes in case of delayed reaction.
- Patient cannot drive for 1 hour following an injection of contrast

5.9. Method for administering GTN spray.

- The GTN spray will be indicated as necessary or that the patient is suitable for GTN spray on the referral letter or request form from the cardiologist.
- **If there is no specific protocol or prescription then the Assistant Practitioner should not administer GTN spray under any circumstances.**
- The GTN spray should only be administered by the Assistant Practitioner according to the prescription on EPIC.
- Introduce yourself to the patient by name and professional title.
- Check patient identity (three forms of identification, ID policy) and clinical details.
- Explain the procedure to the patient and gain written consent.
- Check that the patient has no contraindications to GTN spray and has been using it prescribed by the Cardiologist. If the patient has allergies, other contraindications or questions discuss with the Supervising Radiographer.
- Ensure that the emergency drugs are in date and present in the room (see Sections 5 & 6 above).
- Ask the Supervising Radiographer to check the name, date and batch number of the GTN spray.
- If the Cardiologist is in attendance in the scanner and has agreed that the GTN spray should be administered then one or two sprays as directed by the

cardiologist should be given to the patient whilst on the CT scanner bed prior to the procedure starting.

- The patient should be observed for adverse reactions during this time.
- The batch numbers and expiry dates of the GTN spray must be recorded on the patient's attendance episode on CRIS and bar codes scanned into the Patient's MAR on EPIC.

5.10. Method for administering Hyoscine Butylbromide

- Work in line with the trust policy for The preparation and administration of injectable pharmaseuticals.
- Hyoscine Butylbromide will be indicated on the appropriate scan protocol in the CT Protocol Folder and will be documented on the patients CRIS appointment details.
- **If there is no PSD or prescription then the Assistant Practitioner should not administer Hyoscine Butylbromide under any circumstances.**
- The Hyoscine Butylbromide should only be administered by the Assistant Practitioner according to the prescription.
- Introduce yourself to the patient by name and professional title.
- Check patient identity (three forms of identification, ID policy) and clinical details.
- Explain the procedure to the patient and gain written consent.
- Using the Hyoscine Butylbromide (Buscopan) Checklist check the patient has no contraindications to Hyoscine Butylbromide administration and obtain their signature. If the patient has allergies, other contraindications or questions discuss with the Supervising Radiographer before cannulation.
- Ensure that the emergency drugs are in date and present in the room (see Sections 5 & 6 above).
- Ask the Supervising Radiographer to check the name, date and batch number of the Hyoscine Butylbromide.
- Draw up the 1ml vial of Hyoscine Butylbromide into a 1ml syringe, ensuring all air has been expelled from the syringe.
- This may then be administered as per the prescription under the direction of the Supervising Radiographer via the patient's cannula.
- The patient's cannula should be flushed with a pre-loaded 10ml syringe of 0.9% Sodium Chloride following administration of the Hyoscine Butylbromide.
- The patient should be observed for adverse reactions during this time.
- The batch numbers and expiry dates of the Hyoscine Butylbromide must be recorded on the Hyoscine Butylbromide checklist and signed by both the AP (as injector) and Radiographer (as witness); this should then be scanned onto the patient's attendance episode on CRIS.
- Patient should be reminded that Hyoscine Butylbromide can blur the vision and so they should not drive for 1hour after the procedure, as indicated on the Hyoscine Butylbromide checklist that they have read, completed and signed.

5.11. Infection Control

- Procedure should observe sterile precautions
- Avoid contaminating needles and equipment when drawing up contrast
- Wash hands before and after patient contact
- Keep all cuts and grazes covered
- Keep nails short and clean

- Use gloves

5.12. Complications

- Intra-arterial injections.
- Reaction to contrast, GTN spray or Hyoscine Butylbromide.
- Extravasation.
- Needle-stick injury.
- In an attempt to reduce the risk of complications observe the injection site during the injection where possible and observe the patient for signs of reaction, e.g. rash, itching, sneezing, shortness of breath etc.

5.13. Needle-stick Injuries

5.13.1. For needle-stick injuries follow hospital protocol for Management of Inoculation Injuries but typically;

- Allow the area to bleed if relevant. Do not suck or squeeze the affected area
- Wash the affected area with soap and running water or rinse the area with copious amounts of water whichever is most appropriate.
- Cover affected area with waterproof plaster, if appropriate.
- Report the incident to the person in charge (Senior Radiographer / Ward sister / Doctor) at the time
- Contact Occupational Health to report the inoculation injury, for northern services this should be done via email and advice will be given; contact: Occupational health.
- Complete an incident report (Datix) within the remaining period of the shift in which the injury occurs
- In high risk patients, arrangements should be made for blood samples from the donor and recipient to be taken immediately

5.14. Safety considerations when administering contrast and medication

5.14.1. It is a Trust requirement that all medications and contrast must be checked by a registered healthcare professional according to current competencies.

5.14.2. It is essential that the second checker understands their role and has the necessary experience and competence to detect any problem, challenge and intervene as necessary. If this is not the case, the second checker may decline to carry out the task of second checking, stating their reasons.

5.14.3. When completing the second check, it is best practice for the second checker to begin the process by assuming that an error has been made and then carry out sufficient checks to ensure that no error exists.

5.14.4. Trust requirements for a second check are as follows:

- Controlled drugs, according to and following the Trust Controlled Drugs Policy and Standard Operating Procedure.
- Injectable medicines, according to and following the Trust Injectable Medicines Policy and Standard Operating Procedure.
- Administration of medicines to in-patients who are under 18 years of age.

5.14.5. Medicines prepared but subsequently not administered to a patient must be disposed of correctly. Medicines must not be returned to the container from which they were removed.

5.14.6. Administration of medication via Patient Prescription on EPIC or Patient Specific Direction (PSD) must be undertaken in accordance with and following the specific prescription instructions or relevant PSD.

5.14.7. All medicines to be administered via the injectable route must be drawn directly from their original ampoule or container into syringes, and then either administered immediately or, if they are not for immediate use, the syringe is labelled by the person who prepared them and checked before later use. Only one unlabelled medicine must be handled at one time to avoid the potential for confusion / medication error.

5.14.8. The implications of administering the wrong medication or contrast to a patient should be rigorously understood and all staff must adhere to the Trust policies for administration of medicines and injectable medicines.

5.15. Incident Reporting

In the event of an incident or near miss involving medication or contrast, immediate action must be taken to prevent or minimise the impact on the patient, acting in the patient's best interest where necessary.
Any incident occurring during administration must be reported according to xxx Trust incident reporting procedure and the Trust SOP for medicines incidents is followed.

6. ARCHIVING ARRANGEMENTS

6.1. The original of this policy will remain with the author. An electronic copy will be maintained on the Trust Intranet Hub. Archived electronic copies will be stored on the Trust's "archived policies" shared drive and will be held indefinitely.

6.2. This document will be stored electronically on the radiology G:drive here and maintained on Q-Pulse

6.3. Archived electronic copies will be stored in the obsolete documentation/archive folder here.

6.4. All paper copies past the review date will be destroyed with only the electronic obsolete copy available (as above).

7. PROCESS FOR MONITORING COMPLIANCE WITH AND EFFECTIVENESS OF THE STANDARD OPERATING PROCEDURE/ GUIDELINE

7.1. To evidence compliance with this policy, the following elements will be monitored:

What areas need to be monitored?	How will this be evidenced?	Where will this be reported and by whom?
Local compliance with policy	Internal Audit	CT Staff reporting audit and incidents to Radiology Management Group
Monitoring of incidents	Minutes of meetings	Monitored via Specialty Governance Group

Positive assurance of compliance	Minutes of Meetings	Monitored by Radiology Management Group

8. REFERENCES

- Department of Health (2011) Enabling Excellence Autonomy and Accountability for Healthcare Workers, Social Workers and Social Care Workers. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216580/dh_124374.pdf

- Ionising Radiation (Medical Exposures) Regulations 2017. Statutory Instruments 2017 No 1322 http://www.legislation.gov.uk/uksi/2017/1322/pdfs/uksi_20171322_en.pdf

- Society of Radiographers (2012) Scope of Practice of Assistant Practitioners
- https://www.sor.org/learning/document-library/download-formats/epub/6714

- National Patient Safety Agency (NPSA) (2007) Promoting safer use of injectable medicines, Multi professional safer practice standards for: prescribing, preparing and administering injectable medicines in clinical areas. www.npsa.nhs.uk/health/alerts

- National Patient Safety Agency Alert 2007: Promoting safer use of Injectable Medicines NPSA/2007/20 https://webarchive.nationalarchives.gov.uk/20171030124202/http://www.nrls.npsa.nhs.uk/resources/?entryid45=59812&p=14

- Medicines Policy for Skilled Non-Registered Staff.

- Medicines Policy

- Controlled Drugs Policy

- Controlled Drugs SOP

- Administration of Medicines Standard Operating Procedure
- Injectable Medicines Policy
- Standard Operating Procedure for Medication Incidents (Managing and supporting staff following a medication incident)
- Identification of Patients in Radiology
- Peripheral Intravenous Cannulation
- Infection Control Policy
- Inoculation policy

APPENDIX A: CT CONTRAST CHECKLIST

Patient ID

Name . . . . . .

DOB . . . . . .

NHS . . . . . .

First Line address/Ward. . . . . .

NHS
Royal Devon
University Healthcare
NHS Foundation Trust

RADIOLOGY DEPARTMENT

CHECK LIST PRIOR TO I.V ADMINISTRATION OF IODINATED LOW OSMOLAR CONTRAST MEDIUM for CT SCANNING.

DRINK.....**@**.....

APPT.....

Batch number
Exp date
Volume

MEDICAL HISTORY	Yes	No	Comments
Are you taking antibiotics			If 'Yes' - use Orange bags
Interleukin therapy			
Metformin			
Anti-coagulant therapy			
Diabetes mellitus requiring treatment (not pre-diabetes)			
Allergies			
Asthma			
Uncontrolled Thyroid problems			
Problems with liver or renal function			
Multiple myeloma			
Phaeochromocytoma			
Had previous contrast?			
Any chance of pregnancy?			
Background Radiation Equivalent			

I CONFIRM THAT THESE DETAILS ARE CORRECT & I CONSENT TO THIS PROCEDURE:

Patient's VERBAL CONSENT:

QUESTIONED BY:

DATE:

Approved Date: 01/06/23 RK/ EW
Review Date: 01/06/26 Author GK/EW path: G:\radiology\CT\CT CONTRAST\CTCONTRAST V5 2023 Version 5
Lead: JA/GK

SURNAME	Decannulate @
EXAM	TIME OF INJECTION
CONTRAST PRESCRIBED PGD/PSD	WEIGHT (kg)
CONTRAST VOLUME	CANNULA
eGFR DATE Cr AKI	CANNULA SITE
HAND HYGIENE…… GLOVES WORN…… SKIN CLEANSING…… SKIN DRY BEFORE CANN…… TEGADERM……	SALINE FLUSH

INITIALS	ATTEMPT 1	2	FAIL

DECANNULATED BY		VIP score	
LEFT IN SITU			

COMMENTS

SCANNED BY……**SIGNATURE** ……

WITNESS …… **SIGNATURE** ……

Omnipaque, Niopam and Visipaque are POMs and therefore must only be prescribed by a medically qualified practitioner. The following guidance applies only to the administration of doses of 100mls or less of the above. Patients requiring doses in excess of 100mls should be referred to a Radiologist.

For diabetic patients or patients over 60 years of age eGFR MUST be checked. For non-diabetic patients blood test must be within 3 months. For diabetic and other high risk patients blood test must be within 6 weeks (see Prevention of Contrast Induced Nephropathy – Identification of Patients at Risk)

For patients with eGFR <40 blood test must be within 2 weeks of appointment

APPENDIX B: CT CARDIAC CONTRAST CHECKLIST

Patient ID

Name . . . . . .

DOB . . . . . .

NHS . . . . . .

First Line address/Ward. . . . . .

NHS
Royal Devon
University Healthcare
NHS Foundation Trust

CT CORONARY ANGIOGRAPHY

	YES	NO	NOTES
Are you taking antibiotics?			IF YES, NEED ORANGE BAG?
Had previous contrast?			
Do you have any allergies?			
Anti-coagulant therapy			
Uncontrolled Thyroid problems			
Diabetes mellitus requiring treatment (not pre diabetes)			Control:
Problems with liver or renal function			
Phaeochromocytoma			
Multiple myeloma			
Interleukin therapy			
Are you on a beta-blocker			
Asthma			Inhaler controlled?
Do you or have you ever smoked?			
Are you currently taking viagra / revatio?			
Are you currently taking verapamil?			
Any chance of pregnancy?			Signature
Background Radiation Equivalent			2 YEARS

I CONFIRM THAT THESE DETAILS ARE CORRECT & I CONSENT TO THIS PROCEDURE:

Patient's VERBAL CONSENT: **QUESTIONED BY:**

DATE:

SURNAME			Decannulate @
CARDIOLOGIST			TIME OF INJECTION
CONTRAST PRESCRIBED PGD/PSD			WEIGHT (kg)
CONTRAST VOLUME			CANNULA
eGFR	DATE		CANNULA SITE
Cr			
AKI			
HAND HYGIENE…… GLOVES WORN…… SKIN CLEANSING…… SKIN DRY BEFORE CANN…… TEGADERM……			SALINE FLUSH

INITIALS	ATTEMPT 1	2	FAIL

OBS PRE SCAN		OBS POST SCAN	
HR		HR	
BP		BP	
SATS		SATS	
DECANNULATED BY:		**VIP Score:**	

	BATCH NO	EXP DATE	DOSE	TIME	SIGNATURE
METOPROLOL					
GTN					

INJECTOR ..... **SIGNATURE** .....

WITNESS ..... **SIGNATURE** .....

APPENDIX C: HYOSCINE BUTYLBROMIBE (BUSCOPAN) CHECKLIST

Northern Devon Healthcare NHS
NHS Trust
Incorporating community services in Exeter, East and Mid Devon

BUSCOPAN CHECKLIST

DO YOU SUFFER FROM ANY OF THE FOLLOWING CONDITIONS?

	YES	NO
GLAUCOMA (narrow angle)		
HEART PROBLEMS*		
MYASTHENIA GRAVIS		
PROSTATIC ENLARGEMENT WITH URINARY RETENTION – must urinate before leaving department		
HAD A COLONSCOPY (CVCOY)		
LOW RES. DIET FOLLOWED (CVCOY)		
GG TAKEN (CVCOY)		

*TO INCLUDE: uncontrolled tachyarrhythmia, myocardial infarction, unstable angina, acute coronary syndrome, recent ventricular arrhythmias.

PLEASE BE AWARE THAT BUSCOPAN MAY GIVE YOU SOME BLURRY VISION AND IT IS ADVISED THAT YOU DO NOT DRIVE FOR 1 HR AFTER YOUR SCAN.

I CONFIRM THAT THESE DETAILS ARE CORRECT AND I CONSENT TO THIS PROCEDURE

PATIENT SIGNATURE		**DATE**

Buscopan: BATCH NUMBER.....EXP DATE.....

Saline: BATCH NUMBER.....EXP DATE.....

DRINK (CVCOY).....

INJECTION SITE .....HAND HYGIENE.....
GLOVES WORN.....
TIME OF INJECTION .....SKIN CLEANSING.....
SKIN DRY BEFORE CANN.....
DECANNULATED BY:.....TEGADERM.....

INITIALS	ATTEMPT 1	2	FAIL

Author EW
Version 7: Updated 09/05/2019
REVIEW 01/08/20
Path: G:\radiology\FORMS\CTMRI) BUSCOPAN CHECK LIST

APPENDIX D: LIST OF MEDICATIONS PERMITTED TO BE ADMINISTERED BY APS WORKING IN THE CT SCANNER

List of medications permitted to be administered by APs working on the CT Scanner		
Approved medications	**Permitted routes of administration**	**Doses**
Iohexol Solution (as Omnipaque ®)	IV and /or oral	As per scanning protocol and prescribed on EPIC or PSD
Iodixanol Solution (eg Visipaque®)	IV	As per scanning protocol and prescribed on EPIC or PSD
Hyocine Butylbromide	IV	As prescribed
GTN spray	Sublingual	As prescribed
Sodium Chloride 0.9%	IV	As per protocol

APPENDIX E: COMMUNICATION PLAN

Royal Devon University Healthcare NHS Foundation Trust

The following action plan will be enacted once the document has gone live.

Staff groups that need to have knowledge of the guideline/SOP	Divisional Directors / General Managers Radiology management Group All Staff working in the CT scanner
The key changes if a revised document	Reviewed, updated to new Trust format, further amendments made to scope of practice following consultation to accommodate change of practices in the CT department and the addition of EPIC and its use negating PSDs; no changes to the medications however doses added to the table in Appendix D.
The key objectives	*To ensure that:* • *The person preparing and administering the contrast agent, GTN or Hyoscine Butylbromide is trained and aware of the potential risks to the patient and is able to carry out the task competently and effectively.* • *The correct patient is identified for the procedure.* • *All contrast, GTN or Hyoscine Butylbromide is checked, prepared and administered safely to the correct patient.* • *Contraindications to the use of contrast agents and other medicines will be recognised and acted upon appropriately* • *Risks to the patient's well-being are minimised* • *Supervision of the task is undertaken by Registered Staff.*
How new staff will be made aware of the procedure/guideline and manager action	Cascade by email from manager, induction process, team meetings, radiology newsletters, notification from Q-pulse

Specific Issues to be raised with staff	Staff should be made aware of this policy.
Training available to staff	Support and advice is available from the CT Superintendent and the Radiology Governance Lead. Training sessions Competencies
Any other requirements	N/A
Issues following Equality Impact Assessment (if any)	N/A
Location of hard / electronic copy of the document etc.	Policy is on the Trust Intranet – Northern Services This document will be stored electronically on the radiology G:drive and maintained on Q-Pulse