

## PATIENT GROUP DIRECTION (PGD)

### Metoprolol Pre-CT Angiogram from Rapid Access Chest Pain Clinic (RACPC)

#### Documentation details

Reference no:	UHDB274
Version no:	3
Valid from:	23/08/2023
Review date:	23/02/2026
Expiry date:	22/08/2026

#### Change history

Version number	Change details	Date
2	Reviewed May 2023-no changes required	May 2023
3	4. Added units to systolic BP <100mmHg. 5. - Specified resting HR. - Added off-label use. - Supply 6 doses. - Additional cautioned drug interactions noted. - Storage in provided packaging to protect from light - Additional drug specific common medication interactions highlighted. - Management of unwell patient.	July 2023

#### Glossary

Abbreviation	Definition
RACPC	Rapid access chest pain clinic
BP	Blood pressure
HR	Heart rate
SBP	Systolic blood pressure

## 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
Jenny Edmunds	Cardiac Nurse specialist
Julia Baron	Cardiology consultant
Hester Smail	Advanced Pharmacist - Cardiology

## 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
For use by cardiac Nurse specialists working within the Rapid Access Chest Pain Clinic (RACPC) at Derby and Burton sites who refer patients for CT angio.
Limitations to authorisation
Specifically for use only by cardiac specialist nurses working within UHDB RACPC.

Organisational Authorisation (legal requirement).			
Role	Name	Sign	Date
Medicines Safety Officer  <i>Pharmacist: Medicines Safety Officer, Chief Pharmacist or assigned deputies)</i>	James Hooley	<b>Signed version held by Pharmacy</b>	<b>23/08/2023</b>

Additional signatories (required as per legislation and locally agreed policy)			
Role	Name	Sign	Date
<b>Advanced Pharmacist - Cardiology</b>  <i>Clinical Pharmacist from PGD working group</i>	<b>Hester Smail</b>	<b>Signed version held by Pharmacy</b>	<b>09/08/2023</b>
Cardiology Consultant  <i>Doctor</i>	<b>Julia Baron</b>	<b>Signed version held by Pharmacy</b>	<b>08/08/2023</b>
Cardiac nurse specialist  <i>Registered Professional representing users of the PGD</i>	<b>Jenny Edmunds</b>	<b>Signed version held by Pharmacy</b>	<b>09/08/2023</b>

Local enquiries regarding the use of this PGD may be directed to [UHDB.PGDgovernance@nhs.net](mailto: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

<b>Qualifications and professional registration</b>	<ul style="list-style-type: none"> <li>- Medical division-cardiac nurse specialists working in RACPC referring patients for CT angiogram</li> <li>- Registered nurse with current NMC registration Cardiology/CCU background</li> </ul> <p>Have been assessed and are competent at assessing patients requiring CT angiogram</p> <p>Has undertaken appropriate training for working under PGD's for the supply and administration of medicines.</p>
<b>Initial training</b>	<ul style="list-style-type: none"> <li>- Completion of all Essential-to-role training as outlined in the UHDB PGD policy.</li> <li>- Individual has read and understood full content of this PGD and signed authorisation (section 7)</li> <li>- Completion of Medicines Management Drug Assessment</li> <li>- Group education on the use of beta-blockers and side effects. Competency booklet to be completed and signed off before using PGD. Records to be kept by cardiac nurse specialists.</li> </ul>
<b>Competency assessment</b>	<p>Competency to be assessed by senior cardiac nurse.</p> <p>Staff operating under this PGD are encouraged to review their competency using the <a href="#">NICE Competency Framework for health professionals using patient group directions</a></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 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>
<b>Ongoing training and competency</b>	<ul style="list-style-type: none"> <li>- Annual Medicines Safety Training (essential to role)</li> <li>- Review/repeat initial training above when this PGD is revised</li> </ul> <p>Organisation PGD or medication training as required by employing Trust/organisation.</p>
<p><b><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></b></p>	

**4. Clinical condition or situation to which this PGD applies**

<b>Clinical condition or situation to which this PGD applies</b>	Patients requiring further investigations with a CT angiogram
<b>Criteria for inclusion</b>	<ul style="list-style-type: none"> <li>• Patients 16 years of age and over</li> <li>• Patients who do not already take a beta blocker, referred for CT angiogram via the rapid access chest pain clinic (RACPC)</li> </ul>
<b>Criteria for exclusion</b>	<ul style="list-style-type: none"> <li>• Previous sensitivity or intolerance to drug or any ingredient</li> <li>• Patients under 16 years of age</li> <li>• Patients already taking a beta-blocking agent</li> <li>• Patients already taking verapamil</li> <li>• Prinzmetal's angina</li> <li>• Phaeochromocytoma (apart from specific use with alpha-blockers)</li> <li>• Patients with moderate or severe COPD/asthma (e.g. audible wheeze, short of breath on climbing a flight of stairs)</li> <li>• Systolic BP &lt;100mmHg</li> <li>• Existing bradycardia &lt;55</li> <li>• 2nd or 3rd degree heart block</li> <li>• Patients with uncontrolled heart failure</li> <li>• Severe peripheral arterial disease</li> <li>• Sick sinus syndrome</li> <li>• Metabolic acidosis</li> </ul>
<b>Cautions including any relevant action to be taken</b>	Elderly frail patients, asthmatic patients, patients with borderline low BP (<110 systolic BP) and pulse <60, severe aortic stenosis (AS) or aortic regurgitation (AR) - discuss with a consultant
<b>Action to be taken if the patient is excluded</b>	<ul style="list-style-type: none"> <li>• Record reasons for exclusion in patient notes</li> <li>• Refer to a cardiologist for alternative treatment</li> </ul>
<b>Action to be taken if the patient or carer declines treatment</b>	<ul style="list-style-type: none"> <li>• Document advice given</li> <li>• Discuss an alternative treatment with a cardiologist</li> </ul>
<b>Arrangements for referral for medical advice</b>	Discussion with cardiologist

## 5. Description of treatment

<b>Name, strength &amp; formulation of drug</b>	Metoprolol 100mg if resting HR > 70/min and SBP >130mmHg Metoprolol 50mg for all others
<b>Legal category</b>	POM
<b>Route / method of administration</b>	Oral
<b>Indicate any off-label use (if relevant)</b>	Licensed medicine. Off-label use (indication).
<b>Dose and frequency of administration</b>	Twice daily. Six doses to be taken at set intervals pre-CT angiogram. Maximum 200mg/day if having 100mg twice daily
<b>Duration of treatment</b>	Twice daily for 3 days before the procedure. Six doses to be taken at set intervals pre-CT angiogram (last dose to be taken 1 hour before the scan).
<b>Quantity to be supplied (leave blank if PGD is administration ONLY)</b>	6 doses
<b>Storage</b>	Stock must be securely stored according to UHDB medicines policy and in conditions in line with SPC as detailed below:  Store in the provided packaging in order to protect from light.
<b>Drug interactions</b>	The following interactions have been identified and should be reviewed where it is known a patient is on the following medicines:  Verapamil, diltiazem, amiodarone, flecainide, mexiletine, theophylline.  This list is not exhaustive and a detailed list of drug interactions is available in the SPC, which is available from the electronic Medicines Compendium website: <a href="http://www.medicines.org.uk">www.medicines.org.uk</a>
<b>Adverse reactions</b>	The following side effects are possible: Bradycardia Hypotension Bronchospasm  A detailed list of adverse reactions is available in the SPC, which is available from the electronic Medicines Compendium website: <a href="http://www.medicines.org.uk">www.medicines.org.uk</a>
<b>Management of and reporting procedure for adverse reactions</b>	Seek medical assistance immediately if patient is unwell. Administer IV fluids if systolic BP <90mmHg or < 100mmHg and patient dizzy. Administer salbutamol 2.5mg nebuliser if breathless and wheezy. Administer atropine or salbutamol if heart block or severe bradycardia. Glucagon reverses beta-blocker overdose.

	<ul style="list-style-type: none"> <li>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: <a href="https://yellowcard.mhra.gov.uk">https://yellowcard.mhra.gov.uk</a></li> <li>Record all adverse drug reactions (ADRs) in the patient's medical record.</li> <li>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.</li> </ul>
<b>Written information to be given to patient or carer</b>	Verbal advice on why the drug is needed for investigation, action and management of adverse effects
<b>Patient advice / follow up treatment</b>	<p>Inform the individual/carer of possible side effects The individual/carer should be advised to seek medical advice in the event of an adverse reaction. Patient to contact CT to inform unable to take beta-blocker</p>
<b>Records</b>	<ul style="list-style-type: none"> <li>ePMA (Electronic Prescribing system) UHDB</li> <li>Medical record/notes in RACPC</li> </ul> <p>Either the system holding the record, or the healthcare practitioner working under the PGD, must capture/document all of the following:</p> <ul style="list-style-type: none"> <li>name of individual, address, date of birth and GP with whom the individual is registered (if relevant)</li> <li>name of registered health professional</li> <li>name of medication supplied/administered</li> <li>date of supply/administration</li> <li>dose, form and route of supply/administration</li> <li>quantity supplied/administered</li> <li>batch number and expiry date (if applicable e.g. injections and implants)</li> <li>advice given, including advice given if excluded or declines treatment</li> <li>details of any adverse drug reactions and actions taken</li> <li>Confirm whether <u>supplied and/or administered</u> and that this was done via Patient Group Direction (PGD)</li> </ul> <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

<b>Key references</b>	<ul style="list-style-type: none"><li>• <i>Electronic Medicines Compendium</i> <a href="http://www.medicines.org.uk/Metoprolol%20tartrate%20100mg%20film-coated%20tablets%20-%20Summary%20of%20Product%20Characteristics%20(SmPC)%20-%20(emc)">(http://www.medicines.org.uk/Metoprolol tartrate 100mg film-coated tablets - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk)</a></li><li>• <i>Electronic BNF</i> <a href="https://bnf.nice.org.uk/Metoprolol%20tartrate%20 %20Drugs%20 %20BNF%20 %20NICE">https://bnf.nice.org.uk/ Metoprolol tartrate   Drugs   BNF   NICE</a></li><li>• <i>NICE Medicines practice guideline "Patient Group Directions"</i> <a href="https://www.nice.org.uk/guidance/mpg2">https://www.nice.org.uk/guidance/mpg2</a></li></ul>
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## 7. Registered health professional authorisation sheet

**PGD Name [version]: UHDB - Rapid Access Chest Pain Clinic - Metoprolol [v1]**  
**PGD ref: UHDB274**

**Valid from: 23/08/2023**                      **Expiry date: 22/08/2026**

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.