Worcestershire Acute Hospitals NHS Trust

Pre-operative Management of antiplatelet medications

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

Anti-platelets are prescribed to reduce the risks of arterial thrombus, usually for prevention of cardiac, neurological or peripheral thrombus formation.
The decision about management of antiplatelets should be an individualised decision and should be discussed with the patients. Input from the relevant specialists should be sought when relevant or complex. Some general principles are given below:

This guideline is for use by the following staff groups :

Anaesthetists
Pre-operative assessment nurses
Surgeons
Cardiologists

Lead Clinician(s)

James Hutchinson	Anaesthetist
Helen Routledge	Cardiologist
Will Foster	Cardiologist

Approved by:
Document Owner with no changes on: 3rd October 2025

Medicines Safety Committee on: 3rd October 2025

This guideline should not be used after end of: 3rd October 2028

Key amendments to this guideline

Date	Amendment	Approved by:
Dec 2023	Rewording of section 2.3 – clarification that patients solely on a DOAC for stent protection will require perioperative bridging	James Hutchinson Keith Hinton
Oct 25	Document approved with no changes	Dr Hutchinson/Keith Hinton

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Introduction
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1. ***Single Antiplatelet Therapy***

Aspirin
Aspirin is commonly used for primary (i.e. to prevent a heart attack or stroke) or secondary prevention (i.e. to reduce the risks of another heart attack or stroke happening again).

Generally the decision about whether to continue or discontinue aspirin depends on the surgery, the patients bleeding risk and the patient's thrombus risk.

For most surgery within Worcestershire Acute Hospitals Trust aspirin can be safely ***continued*** with minimal risks of excessive bleeding. Some specialties (i.e. certain eye operations) may prefer their patients to stop aspirin for surgery and the surgeon is expected to discuss this with the patient at the time of listing.

For primary and secondary prevention it is recommended that patients continue with low dose aspirin (i.e. 150mg or lower) perioperatively unless the surgery cannot be done without stopping aspirin.

Patients with coronary stents (whether drug eluting or bare metal stent) should continue aspirin perioperatively due to the risks of in stent thrombus. Any decision to stop aspirin in these patients should be discussed with a cardiologist beforehand.

Aspirin irreversibly inhibits platelets. The only way to reverse aspirins effects is to wait for new production of platelets. Generally it takes 10 days for total platelet renewal, however for normal haemostasis 7 days is required. Therefore when stopping aspirin, 7 days clear of aspirin is recommended for the effect to be completely reversed.

Aspirin reference table	
Primary prevention	Surgeon may choose to stop aspirin for 7 days prior to surgery if bleeding risks felt to outweigh thrombus risks. Pre-op clinic will not automatically stop aspirin if not instructed to (i.e. in surgical letter)
Secondary prevention (patient has had previous thrombus i.e. angina, ACS, ischaemic limb, TIA or CVA)	It is recommended that aspirin is continued unless bleeding risks outweigh thrombus risks (i.e. for surgery such as posterior chamber eye surgery)
Patient has coronary stent (drug eluting or bare metal)	It is strongly recommended that aspirin is continued peri-operatively due to high risk of in stent thrombosis

Clopidogrel

Some patients will take clopidogrel instead of aspirin for primary or secondary prevention. These are often patients who cannot tolerate aspirin due to side effects (i.e. GI upset). Please refer to section below for non-cardiac indications for clopidogrel.

Performing surgery and neuraxial blockade for patients on clopidogrel is associated with high bleeding risk. Clopidogrel should therefore be paused for 7 days prior to surgery with moderate or high bleeding risks. If the patient can tolerate aspirin 75mg this could be a reasonable alternative to take while off clopidogrel. If the patient is high risk for thrombus please discuss with POA anaesthetist before advising to stop clopidogrel.

Section 2. Dual antiplatelet therapy

Dual antiplatelet therapy (DAPT) is often given to patients at high risk of myocardial ischaemia. Typically these patients are patients who have:

1. Had a recent coronary artery stent (within 6-12 months)
2. Had an acute coronary syndrome (within 6-12 months)
3. Co-existing atrial fibrillation require special consideration

It is worth noting that if surgery can be safely delayed until after the DAPT period then it should be. The decision to proceed within the DAPT period is a risk benefit decision to be considered by the surgeon, cardiologist and anaesthetist and discussed with the patient.

2.1 Patients with a recent coronary stent

During coronary stent deployment there is significant trauma to the endothelium. The thrombogenic struts of the stent are exposed to passing coronary blood. There is therefore a risk of in-stent thrombus until the endothelium can re-grow. During this period dual antiplatelet therapy (DAPT) with aspirin and another antiplatelet (e.g. clopidogrel) are needed. Bare metal stents (BMS) typically require 6 weeks to allow endothelial re-growth. New generation drug eluting stents (DES) typically require DAPT for 6 months. Older generation DES required 12 months of DAPT. Some patients are at higher risk of in stent thrombosis forming (i.e. stents over 25mm, stents for bifurcating lesions, multiple or overlapping stents, recent MI, heart failure or diabetes) and this subgroup may require longer DAPT periods (i.e. 12 months).

The management of dual antiplatelet therapy requires an individualised approach balancing surgical bleeding with stent thrombus risks. It should include input from cardiology, anaesthesia, surgery and should be discussed with the patient.

It is recommended that patients with coronary stents:

- When possible, have surgery deferred until after the DAPT period is finished. When surgery does continue the patient should continue on aspirin perioperatively
- If surgery is required within the DAPT period (i.e. for malignancy or aneurysm) there must be a discussion with the specialists (i.e. cardiology) and patient and a decision made based on the bleeding risk of surgery.

2.2 Patients who have had recent Acute Coronary Syndrome but no stent inserted

Occasionally a patient will have an ACS (i.e. STEMI, NSTEMI or unstable angina) which is not amenable to treatment with coronary stenting. 6-12 months of DAPT may be recommended instead (and sometimes the patient is referred for CABG surgery).

Please follow the coronary artery stent principles when advising these patients i.e:

- When possible postpone surgery until outside the DAPT period
- If surgery must continue based on risks/benefits please discuss with cardiology regarding antiplatelet management

Dual antiplatelet reference table	
Patient is outside of designated DAPT period i.e. outside of: - 6 weeks for bare metal stent - 6 months for drug eluting stent - outside recommended DAPT period if ACS patient	Continue aspirin peri-operatively. Do not pause. Second antiplatelet could be stopped after discussion with anaesthetist and cardiologist. Generally clopidogrel/prasaugrel and ticagrelor are stopped for 7 days before surgery (5 days is acceptable for ticagrelor).
Patient is within DAPT period i.e. within: - 6 weeks for bare metal stent - 6 months for drug eluting stent - Within recommended DAPT period if ACS patient	High risk situation due to risk of in stent thrombus Surgery should be deferred, when safe, until after the DAPT period. If not possible to defer: - Surgery with low bleeding risk should continue while on DAPT (dermatology, dental or cataract surgery) - Surgery with higher bleeding risk needs discussion between anaesthetist, surgeon and cardiology. DAPT may be able to be paused if cardiology and patient in agreement.

Timing of stopping dual antiplatelet therapy in surgical patients								
Day -8 Take last dose Prasaugrel / clopidogrel/ ticagrelor	**Day -7** Aspirin only	**Day -6** Aspirin only	**Day -5** Aspirin only	**Day -4** Aspirin only	**Day -3** Aspirin only	**Day -2** Aspirin only	**Day -1** Aspirin only	**Day of op** Aspirin only

2.3 Patients on a DOAC with a coronary stent

Some patients may be on a DOAC for coronary stent protection. Typically these are patients with atrial fibrillation and a coronary stent and the DOAC provides anticoagulation for both conditions.

Stopping the DOAC peri-operatively could leave their stent unprotected and raise the risk of in-stent thrombosis.

In these situations the patient should be advised to take an antiplatelet perioperatively to reduce the risk of stent thrombosis.

If more than 12 months has passed since stent insertion then aspirin 75mg is likely to provide adequate cover. This should be discussed with cardiology. A typical bridging plan for a patient on a DOAC for stent protection could be:

Day-3 Take last dose of oral anticoagulant (i.e. DOAC) and also take Aspirin 75mg
Day -2 Take Aspirin 75mg
Day -1 Take Aspirin 75mg
Day of surgery Take Aspirin 75mg
Post operatively the DOAC can be restarted and aspirin stopped

If the stent has been inserted within 12 months the case should be discussed with cardiology.

3. Patients on clopidogrel for non-cardiac causes (i.e. cerebrovascular disease)

Clopidogrel may be used as secondary prevention in patients who have had a TIA or CVA.

The decision about whether to continue or pause clopidogrel perioperatively is an individualised decision that considers bleeding and thrombus risks.

If surgery is considered low bleeding risk (i.e. dental or cataract) then the surgery may proceed while the patient is on clopidogrel.

If the surgery is higher risk of bleeding then stopping clopidogrel needs to be considered. Generally clopidogrel is stopped for 7 days prior to surgery (i.e. last dose taken on the 8th day before surgery). Low dose aspirin (75mg) may be given while the patient is off clopidogrel. If the patient cannot tolerate aspirin then dipyridamole can be considered (200mg twice daily – please check the BNF if unfamiliar).

If the thromboembolic event is within 3 months of surgery then ideally surgery is deferred until 3months after the event. This is because there is a high risk of stroke recurrence within 3 months. If the surgery cannot be deferred this should be discussed with the stroke physician, the surgeon and the patient so that an informed decision can be made.

4. Postoperative management of antiplatelets

After surgery antiplatelet medications should be resumed as soon as possible via the oral or NG route.

Caution should be exercised:

- If an epidural has been inserted then non-aspirin antiplatelets (i.e. clopidogrel, ticagrelor or prasaugrel) should be given after the epidural has been removed (i.e. 6 hours following removal). This is because the epidural removal is a risky period for development of epidural haematoma.

- Where patients cannot absorb medications because of the surgery: The combination of pro-thrombotic surgery and lack of antiplatelet is a risk, especially when there is a coronary stent. If a patient cannot absorb following surgery please discuss the case with cardiology for advice about alternative route or alternative antiplatelets or anticoagulants.

Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	These are the 'key' parts of the process that we are relying on to manage risk. We may not be able to monitor every part of the process, but we MUST monitor the key elements, otherwise we won't know whether we are keeping patients, visitors and/or staff safe.	What are we going to do to make sure the key parts of the process we have identified are being followed? (Some techniques to consider are; audits, spot-checks, analysis of incident trends, monitoring of attendance at training.)	Be realistic. Set achievable frequencies. Use terms such as '10 times a year' instead of 'monthly'.	Who is responsible for the check? Is it listed in the 'duties' section of the policy? Is it in the job description?	Who will receive the monitoring results? Where this is a committee the committee's specific responsibility for monitoring the process must be described within its terms of reference.	Use terms such as '10 times a year' instead of 'monthly'.
	Patients should not present for surgery with inappropriate management of antiplatelets	Review of critical incidents Audit	If incidents occur of inappropriate antiplatelet management Audit every 2-3 years	Perioperative practitioners	Clinical Lead for Pre-op assessment	If incidents occur of inappropriate antiplatelet management Audit every 2-3 years

References

Regional Anaesthesia and Patients with Abnormalities of Coagulation
Published by the AAGBI, OAA and RAUK
November 2013
Accessed at:
https://anaesthetists.org/Portals/0/PDFs/Guidelines%20PDFs/Guideline_regional_anaesthesia_patients_abnormalities_coagulation_2013_final.pdf?ver=2018-07-11-163756-520&ver=2018-07-11-163756-520

Muluk et el: Perioperative medication management: Medications affecting Haemostasis. Update May 04 2021. Accessed at www.uptodate.com

Worcestershire Acute Hospitals NHS Trust 'Nil by Mouth' guideline

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Dr Will Foster, Consultant Cardiologist
Dr Helen Routledge, Consultant Cardiologist
Dr Oliver Chapman, Consultant Haematologist
Keith Hinton, Countywide Clinical Team Lead Pharmacist, Critical Care, Surgery and Anaesthetics

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Pre-operative Assessment Governance meeting – Approved January 2022
SCSD Governance meeting
Medicines Safety Committee

Supporting Document 1 - Equality Impact Assessment Tool

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	James Hutchinson, Clinical Director

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Alison Smith	**Lead Pharmacist Medicines Safety**	**alison.smith105@nhs.net**
Date assessment completed	**26/11/2025**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title:** Guideline for Pre-operative Management of antiplatelet medications			
What is the aim, purpose and/or intended outcomes of this Activity?	To provide guidance on the pre-operative management of anti-platelets.			
Who will be affected by the development & implementation of this activity?	❑	Service User	x	Staff
	x	Patient	❑	Communities
	❑	Carers	❑	Other _____

	❑	Visitors	❑	
Is this:	X Review of an existing activity ❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?			
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	See Guideline references, and no evidence of incidents or complaints			
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Not required			
Summary of relevant findings	No impact on equality identified			

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		x		
Disability		x		
Gender Reassignment		x		
Marriage & Civil Partnerships		x		
Pregnancy & Maternity		x		
Race including Traveling Communities		x		
Religion & Belief		x		
Sex		x		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Sexual Orientation		x		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		x		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		x		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
	N/A	.		
How will you monitor these actions?	**N/A**			
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	At the next scheduled review of this guidance or earlier if any equality issues raised or discovered e.g. from incidents or complaints.			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.
1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	Alison Smith
Date signed	26/11/2025
Comments:	
Signature of person the Leader Person for this activity	James Hutchinson
Date signed	26/11/2025
Comments:	Confirmed by email

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval