NHS Wiltshire Clinical Commissioning Group

Summary of antiplatelet options in cardiovascular disease May 2018

The guidance does NOT override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Antiplatelet therapies are used for a number of indications.

This guidance summarizes the recommended antiplatelet regimens for use across NHS BaNES CCG/ NHS Swindon CCG and NHS Wiltshire CCG.

NOTE that this guidance only covers patients under the care of RUH and GWH consultants. It does not cover SFT.

ANTIPLATELET MONOTHERAPY

The majority of patients will require antiplatelet monotherapy.

Indication		First-line treatment option (maintenance/continuation by GP) *N.B. Loading regimes will be supplied by acute trust*	Alternative (especially in the event of C/I or intolerance to first-line options)
Stable coronary artery disease		Aspirin 75mg daily	Clopidogrel 75mg daily
Minor-stroke or Transient Ischaemic Attack (TIA) (in the absence of atrial fibrillation)	**HIGH RISK**	Clopidogrel 75mg daily plus Aspirin 75mg daily for the 1st month, then clopidogrel 75mg daily.	Aspirin 75mg daily with dipyridamole MR 200mg twice daily
	LOW RISK	Clopidogrel 75mg daily	Aspirin 75mg daily with dipyridamole MR 200mg twice daily
Major Ischaemic stroke (NIHSS ≥ 5)		Aspirin dispersible 300mg/day for 2 weeks then clopidogrel 75mg daily (if no indication for anticoagulation). Patients discharged before 2 weeks may start clopidogrel on discharge at the discretion of a stroke specialist	Aspirin 75mg daily with dipyridamole MR 200mg twice daily
PLEASE NOTE: as per local protocol, GPs are asked to start aspirin 300mg DAILY prior to referral to the TIA clinic (if intolerant, clopidogrel 300mg stat, then 75mg daily may be used instead).			
Peripheral arterial disease (PAD)		Clopidogrel 75mg daily	Aspirin 75mg daily
Multivascular disease (i.e. coronary artery disease and stroke / TIA or PAD)		Clopidogrel 75mg daily	Aspirin 75mg daily (with dipyridamole MR 200mg twice daily if prior stroke / TIA)

- Aspirin is not indicated for stroke prevention in patients with Atrial Fibrillation (AF) – see Stroke Prevention in AF guidance on local formulary websites.
- Aspirin is not recommended for the routine use for the primary prevention of cardiovascular disease, in the presence or absence of diabetes and/or chronic kidney disease.
- Prasugrel and ticagrelor are not licensed for use as monotherapy for the primary or secondary prevention of CV disease.

Dr Rachel Hobson, Formulary Pharmacist, Medicines Management. In consultation with RUH & GWH specialist stroke and cardiovascular consultants May 2018. On behalf of BaNES CCG.

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DUAL ANTIPLATELET THERAPY (DAPT)

All patients initiated on DAPT must leave hospital with a clear documented plan that includes the indication and duration of treatment. Clear guidance from the initiating team on when to stop DAPT must be communicated to primary care.

PPI in combination with DAPT is recommended in patients at higher than average risk of GI bleeds (e.g. lansoprazole 30mg OD):

- **History of GI ulcer/ haemorrhage**
- **Anticoagulant therapy**
- **Chronic NSAID/ corticosteriod use**
- **Two or more of the following: age ≥65 years, dyspepsia, gastro-oesophageal reflux disease, Helicobacter pylori infection, chronic alcohol use**

Indication	First line option	Alternatives (in the event of C/I or intolerance to first-line options)
Acute coronary syndrome (ACS) including: • **ST elevation MI (STEMI)** • **Non-ST elevation MI (NSTEMI) (Troponin +ve)** **with or without stent insertion** ***High risk of an atherothrombotic event is defined as:*** • *Age 65 or over* • *Diabetes mellitus needing medication* • *A second prior MI* • *Evidence of multi-vessel CAD* • *Chronic non-end-stage renal dysfunction*	• Aspirin 75mg daily plus ticagrelor 180mg loading followed by 90mg twice daily for one year. -May be reduced to 6 months if bleeding risk high. Discharge information will clarify duration for primary care. **<u>then continue:</u>** a) Aspirin monotherapy long-term[1] OR b) In patients **who are at high risk of atherothrombotic event**[2]. Aspirin 75mg daily plus ticagrelor 60mg twice daily for a maximum of 3 years; followed by aspirin 75mg monotherapy long-term[1]**.** The decision to extend treatment beyond the first year should be made by the cardiologist at the index event	• Aspirin 75mg daily plus prasugrel 60mg loading dose then 10mg[3] daily for one year then continue aspirin monotherapy long-term[1] OR • Aspirin 75mg daily plus clopidogrel 75mg daily for one year; then continue aspirin monotherapy long-term[1]
Unstable angina (Troponin -ve) **HIGH RISK:** • >60 yrs of age • Previous MI or CABG • CAD with stenosis ≥50% in at least 2 vessels • Previous ischaemic stroke • Previous TIA • Carotid stenosis of at least 50% or cerebral revascularization • Diabetes mellitus • PAD • Or chronic renal dysfunction (CrCl <60ml/min)	• Aspirin 75mg daily plus ticagrelor 180mg loading followed by 90mg twice daily for one year then continue: • Aspirin monotherapy long-term	• Aspirin 75mg daily or clopidogrel 75mg daily as monotherapy long- term
Unstable angina (Troponin -ve) **LOW RISK**	• Aspirin 75mg daily plus clopidogrel 75mg daily for one year; then continue aspirin monotherapy long- term[1]	
Elective Percutaneous Coronary Intervention (PCI) with drug eluting stent insertion	• Aspirin 75mg daily plus clopidogrel 75mg daily for 6 months; then continue aspirin monotherapy long- term[1]	• Discuss with cardiology before changing drug therapy
Elective percutaneous coronary intervention (PCI) with bare metal stenting (BMS) or drug eluting balloons	• Aspirin 75mg daily plus clopidogrel 75mg daily for one month then continue aspirin monotherapy long- term[1]	• Discuss with cardiology before changing drug therapy

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Indication	First line option	Alternatives (in the event of C/I or intolerance to first-line options)
Post-Coronary Artery Bypass Graft (CABG) surgery (if initiated prior to hospital discharge)	• Aspirin 75mg daily plus clopidogrel 75mg daily *N.B. Some patients may be prescribed 300mg aspirin monotherapy*; for 12 months post-op then continue aspirin monotherapy long-term[1] • Some patients may require DAPT for a shorter time-frame (6-12 months) and with a different $P2Y_{12}$ inhibitor other than clopidogrel. • This will be decided on a patient specific basis by the surgical team and specified on the discharge summary.	• Aspirin 75mg daily or clopidogrel 75mg daily as monotherapy
Post-Patent Foramen Ovale (PFO) closure	• Aspirin 75mg daily and/or clopidogrel 75mg daily for up to six months then consider aspirin monotherapy long-term[1]	• Discuss with cardiology before changing drug therapy
Following Transcatheter Aortic Valve Insertion (TAVI)	• In line with local guideline. This is usually aspirin 75mg daily or clopidogrel 75mg daily long-term	• Switch to alternative agent. If this is not tolerated discuss with initiating team

[1] Clopidogrel monotherapy long-term may be indicated in some patients – refer to monotherapy antiplatelet table above
[2] Extended treatment with ticagrelor 60mg twice daily with aspirin 75mg daily may be started without interruption (continuation therapy) after initial 1 year treatment with dual antiplatelet therapy, started up to 2 years from the myocardial infarction, or within 1 year after stopping previous adenosine diphosphate (ADP) receptor inhibitor treatment
[3] If patient is over the age of 75 and/or of low bodyweight (under 60kg) a lower maintenance dose of 5mg daily may be considered

TRIPLE THERAPY (Dual antiplatelet therapy plus anticoagulant)

N.B. Do NOT use ticagrelor as part of triple therapy

On occasion, patients may require dual antiplatelet therapy and anticoagulation – for example, in a patient with AF following an ACS event and/or PCI with a stent insertion. The decision to prescribe triple therapy should be made by a consultant cardiologist. The duration of triple therapy should be as short as possible (1-6 months). IF in doubt please clarify with the cardiology team. Recent ESC guidance suggests that using one of the direct oral anticoagulants at the lowest dose effective for prevention of AF-related stroke as part of the triple therapy regimen may be appropriate. Detailed guidance from the ESC can be found at: https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Atrial-Fibrillation-Management. There are a number of on-going and recently reported clinical trials which may result in changes to these recommendation(s).

Aspirin intolerance is defined as either a proven hypersensitivity to aspirin (rash, bronchospasm, angioedema) **or** a history of severe indigestion caused by low-dose aspirin, persisting after addition of a Proton Pump Inhibitor (PPI).

For patients with a history of aspirin induced healed ulcer & HPylori negative consider full dose PPI & aspirin 75mg.

Useful further reading: BMJ article & visual summary: Indications for anticoagulant and antiplatelet combined therapy BMJ 2017; 359:j3782 http://www.bmj.com/content/359/bmj.j3782

References

- NICE TA236: Ticagrelor for the treatment of acute coronary syndromes. Oct 2011 https://www.nice.org.uk/guidance/ta236
- NICE TA210: Clopidogrel and modified release dipyridamole for the prevention of vascular events. Dec 2010 https://www.nice.org.uk/guidance/Ta210
- Royal College of Physicians Intercollegiate Stroke working Group: 2016. National Clinical Guideline for Stroke 5th edition https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines
- NICE TA317: Prasugrel with percutaneous coronary intervention for treating acute coronary syndromes Jul 2014 https://www.nice.org.uk/guidance/ta317
- NICE TA420: Ticagrelor for preventing atherothrombotic events after myocardial infarction. Dec 2016 https://www.nice.org.uk/guidance/ta420
- ESC guidelines for the management of atrial fibrillation developed in collaboration with EACTS. Aug 2016 https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Atrial-Fibrillation-Management

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