





## Chapter 2. Cardiovascular System

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### Key

	<p><b>Red drug</b> see <a href="#">GMMMG RAG list</a></p> <p><i>Click on the symbols to access this list</i></p>
	<p><b>Amber drug</b> see <a href="#">GMMMG RAG list</a></p> <p><i>Click on the symbols to access this list</i></p>
	<p><b>Green drug</b> see <a href="#">GMMMG RAG list</a></p> <p><i>Click on the symbols to access this list</i></p>
<b>U</b>	<p><b>If a medicine is unlicensed this should be highlighted in the template as follows</b></p> <p><b>Drug name U</b></p>
	<p><b>Not Recommended</b></p>
<b>OTC</b>	<p><b>Over the Counter</b></p> <p>In line with NHS England guidance, GM do not routinely support prescribing for conditions which are self-limiting or amenable to self-care. For further details see <a href="#">GM commissioning statement</a>.</p>
<b>Order of Drug Choice</b>	<p>Where there is no preferred 1<sup>st</sup> line agent provided, the drug choice appears in alphabetical order.</p>

### **Additional notes for chapter 2**

Monitoring of renal function and electrolytes is required for many of drugs covered in this chapter, especially in patients who are on multiple drug therapy. Ensure appropriate monitoring for following drugs or groups of drugs:

Digoxin – monitor for signs of toxicity especially in elderly. NB hypokalaemia can predispose to digitalis toxicity. Caution when used with diuretics.

Potassium-sparing diuretics – monitor for hyperkalaemia and hypovolaemia, especially in people taking other diuretics and/or ACE inhibitors.

Low molecular weight heparins - monitor full blood count and potassium levels regularly.

Remember that some medications require to be titrated to ensure achieving optimal results, especially in heart failure and post-MI patients. Follow specific NICE guidance when optimizing therapy with:

- ACE- inhibitors
- ARBs
- statins
- beta blockers.

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.1 Positive inotropic drugs</b>	
<b>Subsection</b>	<b>2.1.1. Cardiac glycosides</b>	
	<b>Digoxin</b> Tablets 62.5 micrograms , 125 micrograms , 250 micrograms	<a href="#">NICE CG180: Atrial fibrillation</a> <a href="#">NICE NG106: Heart failure</a>




<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.2 Diuretics</b>	
<b>Do Not Prescribe</b>	<b>Diuretics with potassium</b>	Criterion 2 (see RAG list)
<b>Subsection</b>	<b>2.2.1 Thiazides and related diuretics</b>	
<b>First choice</b>	<b>Indapamide</b> Tablets 2.5mg	<a href="#">NICE NG136: Hypertension in adults: diagnosis and management</a>
<b>Alternatives</b>	<b>Bendroflumethiazide</b> Tablets 2.5mg, 5mg	
<b>Subsection</b>	<b>2.2.2 Loop diuretics</b>	
<b>First choice</b>	<b>Furosemide</b> Tablets 20mg, 40mg, 500mg	<a href="#">NICE NG148: Acute kidney injury</a>
<b>Alternative</b>	<b>Bumetanide</b> Tablets 1mg, 5mg	
<b>Subsection</b>	<b>2.2.3 Potassium-sparing diuretics</b>	
	<b>Amiloride</b> Tablets 5mg	<a href="#">NICE NG106: Heart failure</a>
<b>Subsection</b>	<b>Aldosterone antagonists</b>	
	<b>Eplerenone</b> Tablets 25mg, 50mg	<b>Gn</b> following specialist initiation <a href="#">NICE NG185: Acute coronary syndromes</a> <a href="#">NICE NG106: Heart failure</a>
	<b>Spironolactone</b> Tablets 25mg, 50mg, 100mg	<a href="#">MHRA DSU: Spironolactone and renin-angiotensin system drugs in heart failure: risk of potentially fatal hyperkalaemia (Feb 2016)</a>

		<a href="#">NICE NG106: Heart failure</a> <a href="#">NICE NG136: Hypertension in adults: diagnosis and management</a> <a href="#">NICE NG185: Acute coronary syndromes</a>
	<b>Finerenone</b> Tablets 10mg, 20mg	<b>G<sub>n</sub></b> following specialist advice <a href="#">NICE TA877: Finerenone for treating chronic kidney disease in type 2 diabetes</a>
<b>Additional notes</b> Spironolactone is significantly cheaper than eplerenone; however, there is no data available to compare cost effectiveness in particular group of patients.		
<b>Subsection</b>	<b>2.2.4 Potassium-sparing diuretics with other diuretics</b>	
	<b>Co-amilofruse</b> Tablets 5mg/40mg	Do not use combined preparations first line.

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.3 Anti-arrhythmic drugs</b>	
<b>Subsection</b>	<b>2.3.2 Drugs for arrhythmias (specialist initiation only)</b>	
<b>Supraventricular &amp; ventricular arrhythmias</b>	<b>Amiodarone</b> (specialist initiation only) Tablets 100mg, 200mg	<b>A</b> shared care protocol in development <a href="#">NICE CG180: Atrial fibrillation</a> <a href="#">MHRA DSU: Amiodarone (Cordarone X): reminder of risks of treatment and need for patient monitoring and supervision, March 2022</a>
	<b>Amiodarone</b> Injection	<b>R</b> <a href="#">NHS England Items which should not be routinely prescribed in primary care: Guidance for CCGs</a>
	<b>Flecainide</b> (specialist initiation only) Tablets 50mg, 100mg	<b>G<sub>n</sub></b> following specialist initiation <a href="#">NICE CG180: Atrial fibrillation</a>
<b>Supraventricular arrhythmias</b>	<b>Dronedarone</b> (specialist initiation only) Tablets 400mg	<b>G<sub>n</sub></b> following specialist initiation. Regular monitoring required, see SPC <a href="#">MHRA DSU: dronedarone monitoring, Oct 2011</a> <a href="#">NICE TA197: Atrial fibrillation - dronedarone</a>
<b>Ventricular arrhythmias</b>	<b>Mexiletine</b> Capsules 50mg, 100mg, 200mg	<b>R</b>

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.4 Beta-adrenoceptor blocking drugs</b>	
<b>First choice dependant on indication</b>	<b>Bisoprolol</b> Tablets 1.25mg, 2.5mg, 3.75mg, 5mg, 7.5mg, 10mg	<a href="#">NICE CG180: Atrial fibrillation</a> <a href="#">NICE NG106: Heart failure</a> <a href="#">NICE NG136: Hypertension in adults: diagnosis and management</a> <a href="#">NICE CG126: Stable angina</a> <a href="#">NICE NG185: Acute coronary syndromes</a> <a href="#">NICE CG107: Hypertension in pregnancy</a>
	<b>Carvedilol</b> Tablets 3.125mg, 6.25mg, 12.5mg, 25mg	
	<b>Labetalol</b> (pregnancy) Tablets 100mg, 200mg, 400mg	
	<b>Propranolol</b> (non-cardiovascular indications) Tablets 10mg, 40mg, 80mg Modified release capsules 80mg, 160mg	
<b>Alternative</b>	<b>Atenolol</b> Tablets 25mg, 50mg, 100mg	<a href="#">NICE NG208: Heart valve disease presenting in adults</a>

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.5 Hypertension and heart failure</b>	
<a href="#">NICE NG106: Heart failure</a> <a href="#">NICE NG133: Hypertension in pregnancy</a> <a href="#">NICE NG136: Hypertension</a> <a href="#">Greater Manchester Adult Hypertension Medication Pathway</a>		
<b>Subsection</b>	<b>2.5.1 Vasodilator antihypertensive drugs</b>	
<b>First choice</b>	<b>Hydralazine</b> Tablets 25mg, 50mg	
<b>Subsection</b>	<b>2.5.2 Centrally acting antihypertensive drugs</b>	
	<b>Methyldopa</b> (pregnancy) Tablets 125mg, 250mg, 500mg	
	<b>Moxonidine</b> (specialist initiation only) Tablets 200micrograms, 300micrograms, 400micrograms	<b>G<sub>n</sub></b> Following specialist initiation
<b>Subsection</b>	<b>2.5.4 Alpha-adrenoceptor blocking drugs</b>	
<b>First choice</b>	<b>Doxazosin</b> Tablets 1mg, 2mg, 4mg	
<b>Do Not Prescribe</b>	<b>Doxazosin modified release</b>	<a href="#">Criterion 2 (see RAG list)</a>
<b>Subsection</b>	<b>2.5.5 Drugs affecting the renin-angiotensin system</b>	
	<b>Sacubitril/Valsartan</b> (Entresto®▼) Tablets 24mg/26mg, 49mg/51mg, 97mg/103mg	<b>G<sub>n</sub></b> Following specialist initiation <a href="#">NICE TA388: Sacubitril valsartan for treating symptomatic chronic heart failure with reduced ejection fraction</a>
	<b>2.5.5.1 Angiotensin-converting enzyme inhibitor</b>	
<b>First choice dependent on indication</b>	<b>Lisinopril</b> Tablets 2.5mg, 5mg, 10mg, 20mg	<a href="#">MHRA DSU: Spironolactone and renin-angiotensin system drugs in heart failure: risk of potentially fatal hyperkalaemia (Feb 2016)</a> <a href="#">NICE NG185: Acute coronary syndromes</a>
	<b>Perindopril erbumine</b> Tablets 2mg, 4mg, 8mg	

	<b>Ramipril</b> Capsules 1.25mg, 2.5mg, 5mg, 10mg	<a href="#">NICE CG187: Acute heart failure: diagnosing and managing acute heart failure in adults</a>
<b>Do Not Prescribe</b>	<b>Perindopril arginine</b> Tablets	<a href="#">Criterion 2 (see RAG list)</a>
<b>Additional notes</b> Perindopril should be prescribed generically. Perindopril arginine (Coversyl Arginine®) is not dose equivalent.		
<b>Do Not Prescribe</b>	<b>RESPeRATE®</b> Medical device	<a href="#">Criterion 2 (see RAG list)</a>
<b>Subsection</b>	<b>Miscellaneous</b>	
	<b>Dapagliflozin</b> Tablets: 5mg, 10mg	<p><b>Heart failure:</b>   following specialist advice  <a href="#">NICE TA679: Dapagliflozin for treating chronic heart failure with reduced ejection fraction</a>  <a href="#">NICE TA902: Dapagliflozin for treating chronic heart failure with preserved or mildly reduced ejection fraction</a></p> <p><b>Chronic kidney disease:</b>    <a href="#">NICE TA775: Dapagliflozin for treating chronic kidney disease</a></p>
	<b>Empagliflozin</b> Tablets: 10mg, 25mg	<p> following specialist advice  <a href="#">NICE TA773: Empagliflozin for treating chronic heart failure with reduced ejection fraction</a></p>
<b>Additional information</b> <a href="#">MHRA DSU: SGLT2 inhibitors: updated advice on the risk of diabetic ketoacidosis, April 2016</a> <a href="#">MHRA DSU: SGLT2 inhibitors: updated advice on increased risk of lower limb amputation (mainly toes), March 2017</a> <a href="#">MHRA DSU: SGLT2 inhibitors: reports of Fournier’s gangrene (necrotising fasciitis of the genitalia or perineum), February 2019</a> <a href="#">MHRA DSU: SGLT2 inhibitors: monitor ketones in blood during treatment interruption for surgical procedures or acute serious medical illness, March 2020</a>		



<b>2.5.5.2 Angiotensin-II receptor antagonists (ARB)</b>		
<b>First choice dependent on indication</b>	<b>Candesartan</b> Tablets 2mg, 4mg, 8mg, 16mg, 32mg	<a href="#">MHRA DSU: Spironolactone and renin-angiotensin system drugs in heart failure: risk of potentially fatal hyperkalaemia (Feb 2016)</a>  <a href="#">NICE NG185: Acute coronary syndromes</a>
	<b>Irbesartan</b> (renal patients) Tablets 75mg, 150mg, 300mg	
	<b>Losartan</b> Tablets 12.5mg, 25mg, 50mg, 100mg	
	<b>Valsartan</b> Capsules 40mg, 80mg, 160mg	
<b>Additional notes</b> <p>ARBs are more expensive than ACE inhibitors. ARBs should be reserved only for those patients who suffer from unacceptable side effects using ACE inhibitors. However if patients have suffered angioedema with an ACE inhibitor then an ARB is not recommended.</p>		
<b>2.5.5.3 Renin inhibitors</b>		
<b>Do Not Prescribe</b>	<b>Aliskiren</b> Tablets	<a href="#">Criterion 2 (see RAG list)</a> <a href="#">NHS England Items which should not be routinely prescribed in primary care: Guidance for CCGs</a>

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.6 Nitrates, calcium-channel blockers, and potassium channel activators</b>	
<b>Subsection</b>	<b>2.6.1 Nitrates</b>	
	<p><b>Glyceryl trinitrate</b></p> <p>Spray 400micrograms</p> <p>Sublingual tablets 300micrograms, 500micrograms</p>	<p><a href="#">NICE NG106: Heart failure</a></p> <p><a href="#">NICE CG126: Stable angina</a></p>
	<p><b>Isosorbide mononitrate</b></p> <p>Modified release tablets 60mg</p> <p><i>Branded generics are available at different acquisition cost. Follow local guidance.</i></p> <p>Tablets 10mg, 20mg</p>	
<b>Subsection</b>	<b>2.6.2 Calcium-channel inhibitors</b>	
<b>First choice dependant on indication</b>	<p><b>Amlodipine</b> (first choice dihydropyridine)</p> <p>Tablets 5mg, 10mg</p> <p><b>Lercanidipine</b> (alternative dihydropyridine)</p> <p>Tablets 10mg, 20mg</p>	<p><a href="#">NICE NG136: Hypertension</a></p> <p><a href="#">NICE NG106: Heart failure</a></p> <p><a href="#">NICE CG126: Stable angina</a></p>
	<p><b>Diltiazem</b></p> <p>Modified release tablets 60mg (generic)</p> <p>Modified release tablets/capsules – 90mg, 120mg, 180mg, 200mg, 240mg, 300mg.</p> <p><i>Prescribe by brand, not interchangeable.</i></p>	
	<p><b>Verapamil</b></p> <p>Tablets 40mg, 80mg, 120mg, 160mg</p> <p>Modified release tablets/capsules 120mg, 180mg, 240mg</p>	
<b>Do Not Prescribe</b>	<p><b>Trandolapril/verapamil combination (Tarka®)</b></p> <p>Capsules (product discontinued)</p>	<a href="#">Criterion 2 (see RAG list)</a>

<b>Subsection</b>	<b>2.6.3 Other anti-anginal drugs</b>	
<b>First choice dependant on indication</b>	<b>Ivabradine</b> (specialist initiation only) Tablets 5mg, 7.5mg	<b>G<sub>n</sub></b> following specialist initiation <a href="#">NICE TA 267: ivabradine</a> <a href="#">MHRA DSU: Ivabradine: carefully monitor for bradycardia</a> <a href="#">MHRA DSU: Ivabradine and the risk of cardiac side effects</a> <a href="#">MHRA DSU: Nicorandil (Ikorel): now for second-line treatment for angina – risk of ulcer complications</a> <a href="#">NICE CG126: Stable angina</a>
	<b>Nicorandil</b> Tablets 10mg, 20mg	
	<b>Ranolazine</b> (specialist initiation only) Tablets 375mg, 500mg, 750mg	
<b>Subsection</b>	<b>2.6.4 Peripheral vasodilators and related drugs</b>	
	<b>Naftidrofuryl</b> Capsules 100mg	<a href="#">NICE TA223: Peripheral arterial disease - naftidrofuryl oxalate</a>
<b>Do Not Prescribe</b>	<b>Cilostazol (Pletal®)</b> Tablets	<a href="#">Criterion 2 (see RAG list)</a>
	<b>Inositol nicotinate (Hexopal®)</b> Tablets	<a href="#">Criterion 1 (see RAG list)</a>
	<b>Pentoxifylline (Triental®)</b> Tablets	<a href="#">Criterion 1 (see RAG list)</a>
	<b>Moxisylyte (Opilon®)</b> Tablets	<a href="#">Criterion 1 (see RAG list)</a>

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.8 Anticoagulants</b>	
<b>Subsection</b>	<b>2.8.1 Parenteral anticoagulants</b>	
<b>Low molecular weight heparins</b>	Choice of low molecular heparin as per local policies for prophylaxis and treatment of venous thromboembolism.	<p><a href="#">NICE NG158: Venous thromboembolic diseases: diagnosis, management and thrombophilia testing</a></p> <p><a href="#">NICE NG89: Venous thromboembolism in over 16s: reducing the risk of hospital-acquired DVT or PE</a></p> <p><a href="#">NG191: COVID-19 rapid guideline: managing COVID-19</a></p> <p><b>R</b>, <b>G<sub>n</sub></b> specialist initiation, <b>G<sub>n</sub></b> specialist advice</p> <p>RAG status varies with indication. Please see <a href="#">RAG list</a> for more detail.</p>
<b>Factor Xa inhibitors</b>	<b>Fondaparinux</b> Solution for injection	<p><b>R</b>, <b>G<sub>n</sub></b> specialist initiation, <b>G<sub>n</sub></b> specialist advice</p> <p>RAG status varies with indication. Please see <a href="#">RAG list</a> for more detail.</p> <p><a href="#">NG185: Acute coronary syndromes</a></p>
<b>Hirudins</b>	<b>Bivalirudin</b> (secondary care use only)	<p><b>R</b></p> <p><a href="#">NICE TA230: Bivalirudin for the treatment of STEMI</a></p>
<b>Subsection</b>	<b>2.8.2 Oral anticoagulants</b>	
<p><b>NB: the preferred first line agent in non-valvular atrial fibrillation is apixaban.</b></p> <p><b>For all other indications there is no preferred 1<sup>st</sup> line agent. Drugs appear below in alphabetical order.</b></p> <p><a href="#">NICE NG196: Atrial fibrillation: diagnosis and management</a></p> <p><a href="#">NICE NG89: Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism</a></p> <p><a href="#">NPSA alert: Inappropriate anticoagulation of patients with a mechanical heart valve, July 2021</a></p>		
	<b>Apixaban</b> Tablets 2.5mg, 5mg	<p><b>G<sub>n</sub></b> First choice in non-valvular atrial fibrillation</p> <p><a href="#">NICE TA245: Apixaban for prophylaxis of VTE post hip and knee surgery</a></p> <p><a href="#">NICE TA275: Apixaban for preventing stroke and SE in non-valvular AF</a></p> <p><a href="#">NICE TA341: Apixaban for the treatment and secondary prevention of DVT and/or PE</a></p>

<b>First choice dependant on indication</b>	<p><b>Dabigatran</b> Capsules 75mg, 110mg, 150mg</p>	<p><b>Gn</b> <a href="#">NICE TA157: Dabigatran for prophylaxis of VTE post hip or knee surgery</a> <a href="#">NICE TA249: Dabigatran for prevention of stroke and SE in AF</a> <a href="#">NICE TA327: Dabigatran etexilate for the treatment and secondary prevention of DVT and/or PE</a></p>
	<p><b>Edoxaban▼</b> Tablets 30mg, 60mg</p>	<p><b>Gn</b> <a href="#">NICE TA354: Edoxaban for treating and for preventing DVT and PE</a> <a href="#">NICE TA355: Edoxaban for preventing stroke and systemic embolism in people with non-valvular AF</a></p>
	<p><b>Rivaroxaban▼</b> Tablets 2.5mg, 10mg, 15mg, 20mg</p>	<p><b>For management of CAD/PAD:</b> <b>Gn</b> following specialist recommendation. Treatment should be reviewed at least annually by GP. <a href="#">NICE TA607: Rivaroxaban for preventing atherothrombotic events in people with coronary or peripheral artery disease</a></p> <p><b>For other licensed indications:</b> <b>Gn</b> <a href="#">NICE TA170: Rivaroxaban for prevention of VTE post hip or knee surgery prophylaxis</a> <a href="#">NICE TA256: Rivaroxaban for prevention of stroke and SE in AF</a> <a href="#">NICE TA261: Rivaroxaban for treatment of DVT and prevention of recurrent DVT and PE</a> <a href="#">NICE TA287: Rivaroxaban for treating PE and preventing recurrent VTE</a> <a href="#">NICE TA335: Rivaroxaban for preventing adverse outcomes after acute management of ACS</a> <a href="#">MHRA DSU: Rivaroxaban (Xarelto▼) after transcatheter aortic valve replacement: increase in all-cause mortality, thromboembolic and bleeding events in a clinical trial, Oct 2018</a> <a href="#">MHRA DSU: Erythromycin: drug interaction with rivaroxaban, Dec 2020</a></p>
	<p><b>Warfarin</b> Tablets 1mg, 3mg, 5mg</p>	<p><a href="#">NICE NG158: Venous thromboembolic diseases: diagnosis, management and thrombophilia testing</a> <a href="#">MHRA DSU: Miconazole (Daktarin): over-the-counter oral gel contraindicated in patients taking warfarin, Sep 2017</a></p>

<b>Alternatives</b>	<b>Acenocoumarol</b> Tablets 1mg	<a href="#">NICE NG158: Venous thromboembolic diseases: diagnosis, management and thrombophilia testing</a>
<b>Reversal agents</b>		
<b>Apixaban &amp; rivaroxaban reversal agent</b>	<b>Andexanet alfa ▼</b> Intravenous use 200 mg powder for solution for infusion	<b>R</b> <a href="#">NICE TA697: Andexanet alfa for reversing anticoagulation from apixaban or rivaroxaban</a>
<b>Dabigatran reversal agent</b>	<b>Idarucizumab ▼</b> Intravenous use 2.5 g/50 mL solution for injection/infusion	<b>R</b>
<p><b>Additional notes</b></p> <p>Restrictions on supply of different strengths of warfarin will vary according to local policy. Choice of oral anticoagulant for orthopaedic thromboprophylaxis; apixaban, dabigatran, or rivaroxaban dependant on local protocol. Total supply made from hospital as per local agreements/policies.</p> <p><a href="#">MHRA DSU: Warfarin and other anticoagulants: monitoring of patients during the COVID-19 pandemic, Sept 2020</a></p> <p><a href="#">MHRA Safety Update 2020: Direct-acting oral anticoagulants (DOACs): reminder of bleeding risk, including availability of reversal agents</a></p> <p><a href="#">MHRA Safety Update 2016: Warfarin and calciphylaxis</a></p> <p><a href="#">MHRA Safety Update 2013: NOACs and the risk of serious haemorrhage</a></p>		

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.9 Antiplatelet drugs</b>	
<p><a href="#">NICE NG185: Acute coronary syndromes</a>  <a href="#">NICE NG128: Stroke and transient ischaemic attack in over 16s: diagnosis and initial management</a>  <a href="#">NICE CG181: Cardiovascular disease: risk assessment and reduction, including lipid modification</a>  <a href="#">NICE CG180: Atrial fibrillation</a>  <a href="#">NICE CG107: Hypertension in pregnancy</a>  <a href="#">NICE NG89: Venous thromboembolism in over 16s: reducing the risk of hospital-acquired DVT or PE</a>  <a href="#">NICE NG208: Heart valve disease presenting in adults</a></p>		
<b>First choice dependant on indication</b>	<b>Aspirin</b> Dispersible tablets 75mg, 300mg	Do not routinely offer aspirin for primary prevention of CVD. <a href="#">NICE CG181</a>
	<b>Clopidogrel</b> Tablets 75mg	<a href="#">MHRA DSU: Clopidogrel and proton pump inhibitors: interaction – updated advice, April 2010</a> <a href="#">MHRA DSU: clopidogrel: risk of acquired haemophilia, Dec 2013</a> <a href="#">NICE TA210: Clopidogrel / dipyridamole MR for prevention of occlusive vascular events</a>
	<b>Dipyridamole</b> Modified release capsules 200mg	<a href="#">NICE TA210: Clopidogrel / dipyridamole MR for prevention of occlusive vascular events</a>
	<b>Prasugrel</b> Tablets 5mg, 10mg	<b>G<sub>n</sub></b> specialist initiation only <a href="#">MHRA DSU: prasugrel: rare but serious hypersensitivity reactions, May 2011</a> <a href="#">MHRA DSU: Prasugrel (Efient): increased risk of bleeding, Jan 2014</a> <a href="#">NICE TA317: Prasugrel with percutaneous coronary intervention for treating ACS</a>
	<b>Ticagrelor</b> Tablets 60mg, 90mg	<b>G<sub>n</sub></b> specialist initiation only <a href="#">NICE TA236: Ticagrelor for ACS</a> <a href="#">NICE TA420: Ticagrelor for preventing atherothrombotic events after MI</a>
<b>Alternatives</b>	<b>Aspirin/dipyridamole</b> Modified release capsules 25mg/200mg	<a href="#">NICE TA210: Clopidogrel / dipyridamole MR for prevention of occlusive vascular events</a>

<b>Pericarditis</b>		
	<b>Colchicine U</b> Tablets 500 micrograms	<b>Gn</b> following specialist initiation Unlicensed in this indication. <a href="#">See GM prescribing information for primary care.</a>

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>
<b>Section</b>	<b>2.10 Stable angina, acute coronary syndromes, and fibrinolysis</b>
<b>Subsection</b>	<b>2.10.2 Fibrinolytic drugs</b> (secondary care use only)
Thrombolytic drugs: <a href="#">NICE TA47: Glycoprotein IIb/IIIa inhibitors (partially updated by CG94)</a> , <a href="#">NICE TA52: Myocardial infarction – thrombolysis</a> , <a href="#">NICE TA264: Stroke (acute, ischaemic) - alteplase</a> are recommended for use in accordance with local care pathways and following NICE guidance: <a href="#">NICE CG94: Unstable angina and NSTEMI</a> .	

<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.11 Antifibrinolytics drugs and haemostatics</b>	
	<b>Tranexamic acid</b> Tablets 500mg	<a href="#">NICE CG44: Heavy menstrual bleeding</a>
	<b>Tranexamic acid</b> Solution for injection	<b>R</b> <a href="#">NICE NG232: Head injury: assessment and early management</a>



<b>BNF chapter</b>	<b>2. Cardiovascular system</b>	
<b>Section</b>	<b>2.12 Lipid regulating drugs</b>	
<b>Statins</b>		
<b>First choice</b>	<p><b>Atorvastatin</b> Tablets 10mg, 20mg, 40mg, 80mg</p>	<p><a href="#">NICE CG181: Lipid modification</a> <a href="#">NICE NG28: Type 2 diabetes in adults</a> <a href="#">NICE CG71: Familial hypercholesterolaemia</a> <a href="#">NICE NG185: Acute coronary syndromes</a> <a href="#">MHRA DSU: Statins, Jan 2008</a> <a href="#">MHRA DSU: Statins: very infrequent reports of myasthenia gravis, Sept 2023</a> <a href="#">GMMMG: PCSK9 inhibitors in the treatment of hypercholesterolaemia</a></p>
<b>Alternative</b>	<p><b>Simvastatin</b> Tablets 20mg, 40mg</p> <p><b>Rosuvastatin</b> Tablets, 5mg, 10mg, 20mg, 40mg</p> <p><b>Pravastatin</b> Tablets 20mg, 40mg</p> <p>As a lower intensity statin pravastatin should be reserved for those patients unable to tolerate atorvastatin or simvastatin; see <a href="#">NICE CG181</a>.</p>	
<b>Do Not Prescribe</b>	<p><b>Atorvastatin</b> 30mg and 60 mg preparations</p>	<p>Criterion 2 (see RAG list)</p>
<b>Other lipid regulating drugs</b>		
	<p><b>Bempedoic acid</b> 180 mg tablets</p> <p>To be used together with ezetimibe in line with NICE TA694</p> <p><b>Bempedoic acid/ezetimibe</b> 180 mg/10 mg tablets</p>	<p><b>G<sub>n</sub></b></p> <p><a href="#">NICE TA694: Bempedoic acid with ezetimibe for treating primary hypercholesterolaemia or mixed dyslipidaemia</a></p> <p><a href="#">Summary of national guidance for lipid management</a></p> <p><a href="#">National statin intolerance pathway</a></p>
	<p><b>Ezetimibe</b> Tablets 10mg</p> <p>As per <a href="#">TA385</a> as an option:</p> <ul style="list-style-type: none"> <li>in those patients who are unable to take a statin or are intolerant to statins, or</li> <li>for concomitant use in those patients unable to tolerate higher doses of statins</li> </ul>	<p><a href="#">NICE NG28: Type 2 diabetes in adults</a></p> <p><a href="#">NICE CG71: Familial hypercholesterolaemia</a></p> <p><a href="#">CG181: cardiovascular disease (including lipid modification)</a></p> <p><a href="#">NICE TA385: Ezetimibe for treating primary heterozygous-familial and non-familial hypercholesterolaemia</a></p>

	<p><b>Fenofibrate</b></p> <p>Capsules 67mg, 200mg, 267mg</p> <p>Tablets 160mg</p> <p>As per CG181 - Do not routinely offer fibrates for the prevention of CVD to any of the following:</p> <ul style="list-style-type: none"> <li>• people who are being treated for primary or secondary prevention</li> <li>• people with CKD, type 1 or type 2 diabetes</li> </ul>	<p><a href="#">NICE CG181: Lipid modification</a></p> <p><a href="#">NICE CG71: Familial hypercholesterolaemia</a></p>
	<p><b>Icosapent ethyl ▼</b></p> <p>Soft capsules: 998mg</p>	<p><b>G<sub>n</sub></b> following specialist advice</p> <p><a href="#">NICE TA805: Icosapent ethyl with statin therapy for reducing the risk of cardiovascular events in people with raised triglycerides</a></p>
	<p><b>Inclisiran ▼</b></p> <p>Pre-filled syringe 284 mg</p> <p>An NHSE/NHS Digital tool to aid identification of eligible patients is available for some primary care clinical systems (EMIS / SystmOne). A GM Case Record finding tool will be available from Health Innovation Manchester shortly, <a href="mailto:info@healthinnovationmanchester.com">info@healthinnovationmanchester.com</a>.</p>	<p><b>G<sub>n</sub></b></p> <p><a href="#">NICE TA733: Inclisiran for treating primary hypercholesterolaemia or mixed dyslipidaemia</a></p>
	<p><b>Alirocumab▼</b></p> <p>Only as per NICE TA393</p> <p>By subcutaneous injection</p> <p>Pre-filled pen 75 mg or 150 mg</p> <p>Pre-filled syringe 75 mg or 150 mg</p> <p><b>Evolocumab▼</b></p> <p>Only as per NICE TA394</p> <p>By subcutaneous injection</p> <p>Pre-filled syringe 140 mg</p>	<p><b>R</b></p> <p><a href="#">NICE TA393: Alirocumab for treating primary hypercholesterolaemia and mixed dyslipidaemia</a></p> <p><b>R</b></p> <p><a href="#">TA394: Evolocumab for treating primary hypercholesterolaemia and mixed dyslipidaemia</a></p>
<p><b>Grey drugs</b></p> <p>Items which are listed as Grey are deemed not suitable for routine prescribing but may be suitable for a defined patient population</p>	<p><b>Omega 3 acid ethyl esters</b></p> <p>Omega-3-fatty acids (e.g. Omacor®) should only be used for the treatment of hypertriglyceridaemia under the care of a lipid management specialist. All patients receiving this medication, other than for hypertriglyceridaemia under a lipid management specialist, should have the medication discontinued</p> <p><b>Colesevelam</b></p> <p>Tablets 625mg</p> <p>For use when there is no alternative treatment option due to intolerance, or ineligibility for PCSK9i or inclisiran treatment.</p>	<p><b>G<sub>n</sub></b> following specialist initiation</p> <p><a href="#">Criterion 1 (see RAG list)</a></p> <p><b>G<sub>n</sub></b> following specialist advice</p> <p><a href="#">Criterion 1 (see RAG list)</a></p>

	<p><b>Colestyramine</b>          Oral powder 4g          For use when there is no alternative treatment option due to intolerance, or ineligibility for PCSK9i or inclisiran treatment.</p>	<p><b>G<sub>n</sub></b> following specialist advice  <a href="#">Criterion 1 (see RAG list)</a></p>
<p><b>Do Not Prescribe</b></p>	<p><b>Simvastatin/ezetimibe combination products (e.g. Inegy®)</b>          Tablets</p>	<p><a href="#">Criterion 2 (see RAG list)</a></p>