Dumfries & Galloway Joint Formulary 2025

PRESCRIBE GENERICALLY
WHERE POSSIBLE

Aide Memoire for ALL PRESCRIBERS in NHS Dumfries and Galloway of our preferred drug choices/brands in line with the 2025 formulary

This is a quick alphabetical reference guide to some of the most commonly prescribed drugs in NHS Dumfries and Galloway. Please refer to the full version of the formulary for further advice. Doses are only stated where relevant to a switch.

Thinking of…….	**Prescribe …….**
ACE Inhibitor	Ramipril **CAPSULES**
AIR (Anti-inflamatory Reliever Therapy)	Symbicort® DPI (dosed according to age)
Alogliptin	Sitagliptin
ARB	Candesartan
Asacol MR® (mesalazine)400mg/800mg	Octasa® 400mg (to a max of 2.4g daily for maintenance) Octasa® 800mg (to a max of 4.8g daily treatment dose)
Barrier Cream	Medi Derma – S Barrier Cream or Conotrane® cream
Beta blocker	Bisoprolol or carvedilol
Calcium supplements (plus Vit D)	Accrete D3® ; TheiCal® tablets (dissolves on the tongue where patient has swallowing difficulties)
Co-codamol 12.8/500 or 15/500	Co-codamol 30/500 tablets or prescribe codeine 15mg and paracetamol separately. Alternatively can prescribe one co-codamol 30/500 and one paracetamol
Diclofenac 1% gel/Voltarol® gel	Ibuprofen 5% gel
Diltiazem MR	Adizem XL® or Zemtard XL®
Doxazosin MR	Doxazosin
DOAC (Direct Acting Oral Anticoagulant)	Apixaban (1st), Edoxaban (2nd – where once daily dosing required)
Durogesic®/Fentanyl patches	Consider Morphine* MR (Zomorph® capsules). Prescribe Opiodur® patches if fentanyl needed.
E45	Epimax Moisturising cream®
Effervescent analgesia (co-codamol 8/500, 30/500 and paracetamol 500mg)	Non-soluble analgesia where possible Effervescent preparations are high in salt content.
Eumovate/Eumovate RD	Audovate/Audovate RD
Ferrous Preparations	Ferrous sulphate 200mg tablets or Ferrous fumarate 210mg tablets once daily
Gaviscon® liquid	Peptac® liquid or Gaviscon Double Action Mint® pack size 500ml
Ketoconazole shampoo	Nizoral®
LMWH	Dalteparin
Losec Mups® or omeprazole liquid	Lansoprazole oro dispersible tablets
MART (Maintenance and Reliever Therapy)	Fobumix Easyhaler® (DPI), Luforbec® (MDI) or Bibecfo® (MDI)
Melatonin	Melatonin 2mg MR or Melatonin 3mg immediate release tablets
Mucolytic (acetylcyteine)	Prescribe as NACYS® effervescent tablets
NSAID or COX II inhibitors	Ibuprofen or naproxen. NSAIDs and COXII inhibitors are associated with an increased risk of thrombotic events, GI bleeds and acute kidney injury. Prescribe at lowest dose and shortest duration.
Oral Contraceptive Pill	Levest® 150/30, Rigevidon®
Oxycodone MR/NR	Oxypro® tabs/Shortec® caps
Paracetamol IV	Paracetamol tablets, liquid
PPIs	Omeprazole lansoprazole **CAPSULES** Omeprazole 40mg as 2x20mg capsules
Prednisolone EC tablets or Prednisolone 25mg tablets	Prednisolone Plain 5mg tablets
Ranitidine	Famotidine
Risedronate	Alendronate
SGLT2i	Dapagliflozin
Statin for Primary Prevention	Atorvastatin 20mg
Tramadol	Avoid tramadol (non-formulary). Where opioid indicated, consider codeine or morphine
Triptan	Sumatriptan
Vagifem®/Vagirux®	Generic estradiol 10mcg pessary
Vaginal Moisturiser	Hyalosfemme® Sylk® VM YES® VM
Vitamin D	Valupak® 1000iu/daily or, Stexerol ® 25000iu/once a month

NB Check individual BNF profiles for licensed drug indications, contra-indications and other relevant information
*** Please refer to palliative care guidelines as oxycodone may be considered first choice under specific circumstances**

Contents

Introduction

The NHS Dumfries & Galloway Joint Formulary has involved collaboration across primary and secondary care. The recommendations seek to enable a seamless approach to care epitomised by a single healthcare provider namely NHS Dumfries & Galloway. By listing medicines, and offering prescribing notes and treatment guidance, it is hoped that the joint formulary will guide prescribers in meeting the needs of the majority of patients, wherever they are receiving treatment in NHS D&G.

The formulary offers guidance on the first and second choice drugs across the complete range of therapeutic areas. Prescribing by following guidance in a formulary is one of the many strategies designed to maximise health gain from our prescribing budget. Its place is to facilitate evidence-based cost-effective prescribing across primary and secondary care.

The Scottish Medicines Consortium (SMC) provides advice to Scottish NHS Boards and their Area Drug and Therapeutics Committees (ADTC) about the status of all newly licensed medicines, new formulations of existing medicines and any major new indications for established products. Medicines not accepted for use in Scotland by SMC will not be included in the formulary. Clinicians looking to prescribe these items are able to submit an patient specific application to the ADTC.

A Peer Approved Clinical System (PACS) Teir 2 or Individual Patient Treatment Request application should also be submitted to ADTC if the medicine:

Scottish Medicines Consortium Access Policy Description	Scottish Medicines Access Policy Designation
Is for an indication that has been **considered and not recommended** for use in NHS Scotland by the Scottish Medicines Consortium (SMC)	PACS2
Is accepted for use by SMC but the intended use is **out with** SMC advice	PACS2
Is a medicine which has been submitted and is **awaiting/undergoing evaluation** by the SMC	PACS2
Is designated as an **ultra-orphan drug** and has **not been recommended** by use by the SMC	PACS1
Medicines which are non-submissions or have not yet been submitted to SMC	IPTR

Black triangle drugs are those which are newly licensed medicines which require additional monitoring such as new active substances and biosimilar medicines. Black triangle drugs will not, in general, be included in the formulary unless there is no alternative for a previously unmet need.

Before any drug is placed on the formulary a thorough assessment process is completed and approval granted by ADTC.

NHS D&G joint formulary does not of course take away prescriber's rights to determine what is clinically most appropriate for their patients, nor their responsibility for that decision. There will always be additions and deletions to be made; improvements to the electronic format; audits fo compliance to be carried out and public access to be enabled if the formulary is to remain a 'live' and relative document. Any feedback on the formulary can be sent to dg.dop@nhs.scot

We hope you find the Joint Formulary useful.

Ken Donaldson **Nikki Holmes**

Medical Director **Director of Pharmacy**

Guide

This abbreviated drug list for most clinical areas, includes the names of those drugs suggested as first or second choice in the Dumfries & Galloway Joint Formulary. Drugs recommended as first choice are shaded in grey. Users should refer to the BNF for further detail and more specific information.

The most up to date version of the Dumfries & Galloway Joint Formulary is maintained in electronic form by the Formulary SubCommittee and can be accessed via this link NHS D&G formulary . Access it also available via the Clinical Handbook tab on Beacon.

Prescribers are asked to choose from the formulary in the first instance. This will be appropriate for the majority of patients, the majority of the time. Adherence to the formulary will be monitored. However, non-formulary choices are suitable when the first and second choices have been considered and there is a justifiable reason for choosing a non-formulary drug e.g. contra-indications. The formulary is not designed to contain all medicines that will be required by all patients in every situation.

Generic names have been used for most drugs throughout the formulary to ensure that when a generic drug is available it is prescribed. This will ensure that the cost and risk reduction benefits of this approach are obtained. There are a few occasions where generic prescribing is not considered appropriate (modified release preparations, inhalers and combination products e.g. HRT) and it is recommended that prescribing is by brand name (® Prescribe by brand name).

Strengths have only been mentioned where relevant.

Disclaimer

Unless otherwise stated, the doses where given are for adults with normal hepatic and renal function. Practitioners are advised to consult Medicines for Children for advice on prescribing for children. While every effort has been made to ensure that the information contained within this formulary is accurate, no responsibility or liability can be accepted by those involved in its production for any loss, injury or damage which is suffered as a consequence of any errors, omissions or inaccuracies contained within it. In particular, those prescribing drugs should always check the suitability of the drug and dosage based on the information provided by the manufacturer.

BNF Chapter 1 Gastrointestinal System	
Section 1	**Chronic Bowel Disorders**
Section 1.1	**Coeliac Disease** Local Gluten Free Formulary available at Gluten Free Services – NHS Dumfries & Galloway
Section 1.2	**Diverticulitis Disease and Diverticulitis**
Section 1.3	**Inflammatory Bowel Disease** NICE NG129: Crohn's disease :management NICE NG130: Ulcerative colitis: management **Crohn's disease** **Acute Exacerbation of Crohn's disease** Prednisolone tablets Methyprednisolone IV hospital only Budesonide (Budenofalk® *E/C* Capsules, *E/C* Granules, Entocort® Modified Release Tablets) Prescribing notes: *Budesonide can be used for patients with one or more of distal ileal, ileoccaecal or right sided disease who are unsuitable or have contraindications to a conventional corticosteroid.* *Budesonide may be less effective than prednisolone but may be better tolerated.* *Within acute methylprednisolone IV Injection with a dose of 30mg twice a day – is considered safer and more convenient than hydrocortisone injections four times a day.* **Add on treatment/maintenance of remission – drugs affecting the immune response** Azathioprine tablets – unlicensed indication (specialist initiation) Mercaptopurine Tablets – unlicensed indication (specialist initiation) – use branded Hanixol Methotrexate (specialist initiation only) *Prescribing notes* *All of the above can be used as steroid sparing agents to induce remission* *Thiopurine Blood monitoring: FBC, U&E's, LFT's and CRP at weeks 2, 4, 8 and 12 and if satisfactory then move to 3 monthly bloods.* **Ulcerative colitis** Treatment of acute mild-moderate ulcerative colitis – the severity and extent of the disease should be considered when choosing the route of administration **Ulcerative Proctitis** Mesalazine 1g suppository (Salofalk®) Budesonide 2mg foam enema Budesonide 4mg suppository If not managed on rectal preparation add mesalazine 3mg MR granules (Salofalk®) **Rectosigmoid** Mesalazine 1g Foam Enema (Salofalk®) Budenofalk 2mg foam enema If not managed on rectal preparation add mesalazine 3mg MR granules (Salofalk®) **Disease above the Rectosigmoid** Mesalazine 2g liquid enema (Salofalk) Budesonide 2mg foam enema Mesalazine 3g MR Granules (Salofalk®) **Pancolitis** Octasa 800mg tablets

Severe exacerbation
Prednisolone tablets
Budesonide (Cortiment®) 9mg prolonged release tablets - Restricted for use in patients with UC who present with active left-sided disease and/or proctosigmoiditis who are not suitable for oral prednisolone, as an alternative to budesonide rectal formulations or off-label oral budesonide

Prescribing notes:
Salofalk® is the preferred brand when a patient is being initiated on Mesalazine. If Salofalk® is not suitable, Octasa® is an alternative brand that could be considered. Consideration should be given to reviewing and switching patients prescribed Asacol MR to equivalent dose of Octasa® MR.

Please consider bone protection for patients with repeated or prolonged treatment with corticosteroids.

For repeated courses of steroids (eg more than 2 in a year) please seek specialist advice regarding escalating treatment.

Other Corticosteroids
Budesonide (Jorveza) 1mg orodispersible tablets – specialist initiation for the treatment of eosinophilic oesophagitis in adults (older than 18 years of age) who have been unsuccessfully treated with proton pump inhibitors.

Prescribing notes
This is 6 week treatment course which can be extended to max 12 weeks on review. Consider requirement for blood glucose monitoring.

Immunosuppressants

***** Adalimumab – restricted to specialist use, prescribe by brand *****

Amgevita® SC - preferred biosimilar

Crohn's disease: For the treatment of moderate to severe, active Crohn's disease in adults whose disease has not responded to conventional therapy (including immunosuppressive and/or corticosteroid treatments) or who are intolerant of or have contraindications to such therapies, in line with NICE MTA 187.

Ulcerative colitis: Use in the treatment of moderately to severely active ulcerative colitis in adults is restricted to those patients whose disease has responded inadequately to conventional therapy, including corticosteroids, Mercaptopurine and Azathioprine, or who cannot tolerate, or have medical contraindications for such therapies.

***** Infliximab - restricted to specialist use, prescribe by brand *****

Remsima® IV/SC– preferred biosimilar.

Crohn's disease: Infliximab is formulary for the treatment of moderate to severe active Crohn's disease in adults whose disease has not responded to conventional therapy (including immunosuppressive and/or corticosteroid treatments) or who are intolerant of or have contraindications to conventional therapy, in line with NICE MTA 186.

Ulcerative colitis: Treatment of moderately to severely active ulcerative colitis in adults is restricted to those patient whose disease has responded inadequately to conventional therapy, including corticosteroids, mercaptopurine and azathioprine, or who cannot tolerate, or have medical contraindications for such therapies.

***** Ustekinumab - restricted to specialist use, prescribe by brand *****

Wezenla® SC▼ - preferred biosimilar

Crohn's disease: The treatment of adults with moderately to severely active Crohn's disease who have had an inadequate response with, lost response to, or where intolerant to either conventional therapy or a TNF alpha antagonist or have medical contraindication to such therapies.

Ulcerative colitis: For the treatment of adult patients with moderately to severely active ulcerative colitis who have had an inadequate response with, lost response to, or were intolerant to either conventional therapy or a biologic or have medical contraindications to such therapies.

***** Upadacitinib Tablets (Rinvoq®) – restricted to specialist use *****

Crohn's disease: For the treatment of adult patients with moderately to severely active Crohn's disease (CD) who have had an inadequate response, lost response or were intolerant to either conventional therapy or a biologic agent, or for whom such therapies are not advisable.

Ulcerative colitis: For the treatment of adult patients with moderately to severely active ulcerative colitis who have had an inadequate response, lost response or were intolerant to either conventional therapy or a biologic agent.

***** Filgotinib Tablets (Jyseleca®) – restricted to specialist use *****

Ulcerative colitis: for the treatment of adult patients with moderately to severely active ulcerative colitis (UC) who have had an inadequate response with, lost response to, or were intolerant to either conventional therapy or a biologic agent.

***** Tofacitinib Tablets (Xeljanz®) – restricted to specialist use *****

Ulcerative colitis: For the treatment of adults with moderately to severely active ulcerative colitis is restricted to specialist use in patients who have had an inadequate response, lost response, or were intolerant to either conventional therapy and a biologic agent.

***** Mirikizumab IV/SC (Omvoh®) – restricted to specialist use *****

Ulcerative colitis: For the treatment of adult patients with moderately to severely active ulcerative colitis who have had an inadequate response with, lost response to, or were intolerant to either conventional therapy or a biologic treatment.

***** Risankizumab IV/SC (Skyrizi®) – restricted to specialist use *****

Crohn's disease: for the treatment of patients 16 years and older with moderately to severely active Crohn's disease who have had an inadequate response to, lost response to, or were intolerant to conventional therapy or a biologic therapy, or if such therapies are not advisable.

Ulcerative colitis: for the treatment of adult patients with moderately to severely active ulcerative colitis who have had an inadequate response to, lost response to, or were intolerant to conventional therapy or a biologic therapy. (Business Case not yet through ADTC)

***** Vedolizumab IV/SC (Entyvio®) – restricted to specialist use *****

Crohn's disease: for the treatment of adult patients with moderately to severely active Crohn's disease who have had an inadequate response with, lost response to, or were intolerant to either conventional therapy or a tumour necrosis factor-alpha (TNFα) antagonist.

Ulcerative colitis: for the treatment of adult patients with moderately to severely active ulcerative colitis who have had an inadequate response with, lost response to, or were intolerant to either conventional therapy or a tumour necrosis factor-alpha (TNFα) antagonist.

Prescribing notes
blood monitoring for biologics FBC, U&E's, LFT's and CRP monthly for 3 months and if satisfactory then move to 3 monthly bloods

	Irritable Bowel Syndrome NICE CG61 : IBS in adults diagnosis and management **Antispasmodics** Hyoscine Butylbromide Tablets Mebeverine 135mg Tablets Peppermint oil capsules (Reserved for symptoms of bloating).Prescribe as Mintec® *Prescribing notes* *Mebeverine/Fybogel combination is non formulary – it is more cost effective to prescribe as individual components* **Laxatives – Guanylate Cyclase c receptor agonists** Linaclotide – restricted to specialist initiation for IBS with constipation as predominant feature
Section 2	**Constipation and Bowel Cleansing**
Section 2.1	**Bowel Cleansing** Moviprep® Picolax®
Section 2.2	**Constipation** **Bulk forming laxatives** Ispaghula Husk **Osmotic laxatives** Macrogol 3350 sachets (Laxido®, Laxido Paediatric®) Lactulose Solution Phosphate Enema (first line rectal formulation) **Faecal softeners** Docusate Sodium Capsules **Stimulant laxatives** Bisacodyl Tablets (first line oral preparation) Glycerol Suppositories (first choice rectal formulation) Senna tablets *Prescribing notes* *For laxative use in palliative care refer to national palliative care guidelines* www.palliativecareguidelines.scot.nhs.uk
Section 3	**Diarrhoea (acute)** Oral Rehydration Sachets (Dioralyte®) – for acute diarrhoea Loperamide 2mg Capsules or Codeine Phosphate Tablets Prescribing notes *First line treatment for acute diarrhoea is to prevent dehydration. Loperamide capsules are preferred to tablets*
Section 4	**Disorders of Gastric Ulceration and Ulceration** NICE CG184 Gastro-oesophageal reflux disease and dyspepsia in adults investigation and management
Sections 4.1 & 4.3	**Dyspepsia and gastro-oesophageal reflux disease** **Antacids** Peptac® Suspension (first line compound alginates and proprietary indigestion preparation) Gaviscon Double Action® (only available as mint) Peptac® has the same active ingredient as Gaviscon® Liquid. High in sodium and should be used with caution where salt restriction is important. Co-Magaldrox (Mucogel®) First line antacid with Simeticone.

	Paediatrics Gaviscon® Infant Sachets *Prescribing notes: One dose is equivalent to half a dual sachet.* **H2-receptor antagonists** Famotidine **Proton pump inhibitors** MHRA Drug Safety Update (2014): PPIs and hypomagnesaemia MHRA Drug Safety update (2015): PPIs and SCLE MHRA Drug Safety Update: PPIs in long term use: increased risk of fracture MHRA Drug Safety Update (2014): Clopidogrel and PPIs interaction Omeprazole capsules *(do not prescribe omeprazole 40mg – prescribe as 2x20mg)* Lansoprazole Capsules Lansoprazole Orodispersible tablets (reserved for patients with swallowing difficulties or those who require administration via NG/PEG tube) Omeprazole Intravenous
Section 4.2	**Gastric and Duodenal Ulceration** ***Helicobacter pylori* eradication** **No penicillin allergy** Oral first line for 7 days: Omeprazole 20mg capsules twice daily (or lansoprazole 30mg capsules twice daily) plus amoxicillin 1g twice daily and either clarithromycin 500mg twice daily or metronidazole 400mg twice daily (treatment choice should take into account previous treatment with clarithromycin or metronidazole) **Penicillin allergy** Oral first line for 7 days: PPI as above plus clarithromycin 500mg twice daily and metronidazole 400mg twice daily
Section 6	**Gastro-intestinal smooth muscle spasm** See Section 1.4 – Antispasmodics
Section 7	**Liver disorders and related conditions**
Section 7.1	**Biliary disorders** **Bile acids** Colestyramine Sachets/Colestyramine Light Sachets Please note locally Colestid is preferred second choice over Cholestagel. Local agreement in place – specialist initiation only. **Primary Biliary Cholangitis** Obeticholic acid – specialist initiation Ursodeoxycholic acid
Other	**Hepatic Encephalopathy** Rifaximin tablets – Specialist Initiation Lactulose to inhibitit ammonia production in the intestine/accelerate defaecation
Section 8	**Obesity** Diet and lifestyle changes Orlistat *Prescribing notes:* *Treatment beyond 12 weeks only if weight loss since start of treatment is greater than 5%*

Section 9	**Rectal and anal disorders**
Section 9.1	**Anal fissures** Anusol HC Diltiazem 2% - specialist initiation only Rectogesic® 0.4% ointment – specialist initiation as per local protocol
Section 9.2	**Haemorrhoids** Scheriproct® ointment/suppositories
Section 10	**Reduced exocrine secretions** Creon® Capsules – ongoing intermittent supply issues see Ref Help https://rightdecisions.scot.nhs.uk/dgrefhelp-nhs-dumfries-galloway/gastroenterology/pert-shortage-leaflet/?searchTerm=PERT *Prescribing notes* *Co-prescription of PPI advised to reduce gastric acid degradation*
Section 11	**Stoma care** See local stoma guidance – under review

Back to Contents page

BNF Chapter 2 Cardiovascular System	
Section 1	**Anti Arrhythmics** *Class I membrane stabilising drugs* Flecainide *Class II beta-blockers* Bisoprolol Carvedilol *Class III anti-arrhythmic agents* Sotalol Amiodarone Dronederone – for the prevention of recurrence of AF in patients in whom beta-blockers, class 1c drugs or amiodarone are contraindicated, ineffective or not tolerated. Specialist initiation only. *Class IV calcium-channel blockers (not to be used in patients with LVSD)* Diltiazem – MR preparations should be prescribed by brand (Alizem XL®, Zemtard XL® capsules) Verapamil (Securon®) *Other:* Atropine Adenosine *Prescribing note* *Refer to the clinical handbook for further info on narrow complex tachycardia* **Cardiac glycosides** Digoxin
Section 2	**Bleeding disorders** **Antifibrinolytic drugs and haemostatics** Tranexamic acid
Section 3	**Blood clots**
Section 3.2	**Parenteral anticoagulants:** **Prophylaxis of DVT** Dalteparin **Treatment of DVT and/or PE** Dalteparin **Unstable angina and non-Q-wave MI** Fonaparinux **Oral anticoagulants:** **Prevention of stroke and systemic embolism in patients with valvular AF, treatment of DVT and /or PE** Warfarin **Prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation, treatment of DVT and /or PE** Apixaban Edoxaban (where once daily dosing is desirable) Warfarin *Prescribing Notes* *Please contact Haematology for advice on anticoagulant treatment for recurrent DVT/PE*

	Other – Restricted to use only on advice of Consultant Haematologist in accordance with local protocol **Idarucizumab (Praxibind®) injection/infusion** **Andexanet alfa (Ondexxya®) infusion**
Section 4	**Blood pressure conditions**
Section 4.1	**Hypertension** **NICE Patient decision aid - Hypertension** **NICE: Hypertension in adults: diagnosis and treatment** *Prescribing note* *Please note use calcium channel blocker amlodipine if patient is > 55 years or Afro-Caribbean ethnicity* **Angiotensin-converting enzyme inhibitors** Ramipril capsules *Post stroke / prevention of vascular events in at risk patients* Ramipril capsules **Angiotensin-II receptor antagonists** *Prescribing note* *In patients who are intolerant of ACE inhibitors (e.g bradykinin cough angioedema), an angiotensin-II receptor antagonist may be considered as an alternative.* Candesartan **Calcium-channel blockers** Amlodipine For long acting, once daily preparations - Adipine XL® (Nifedipine) *Prescribing note* *Longer-acting calcium channel blockers generally appear to have fewer adverse effects associated with them (such as flushing, headache, and palpitations), although this is not thought to be the case when considering ankle oedema.* **Beta-adrenoceptor blocking drugs** Bioprolol **Mineralocorticoid Receptor Antagonist (MRA)** Spironolactone Eplerenone (used in men reduced risk of gynecomastia) **Thiazides** Indapamide Bendroflumethiazide **Alpha-adrenoceptor blocking drugs** Doxazosin *Prescribing note* *Doxazosin should be used with caution in patients with heart failure or impaired left ventricular function. It may cause postural hypotension and first dose hypotension. Treatment should be initiated at the lowest dose possible and titrated upwards.*

Section 6	**Heart Failure –** ➢ *For advice on prescribing in HF (heart failure) please contact the Heart Failure Nurse Specialists (HFNS) directly on dg.hf-referrals@nhs.scot* ➢ *Please do not stop any patients HF medications indefinitely without discussing with the HFNS first.* ➢ *If stopping for a period, please ensure they are reviewed for restarting when appropriate – HFNS team can offer guidance with this.* **<u>Heart Failure with reduced ejection Fraction</u> (HF-rEF) – will be under HFNS until stable** LVEF ≤40% - Prescribe the 4 Pillars of Heart Failure • **Entresto** if LVEF ≤40% - aim to titrate up dose every 2-3 weeks (accept a little light-headedness if stands up too quickly). ***Ensure ACE Inhibitors are STOPPED 48 hours prior to initiation of Entresto.*** • **Betablocker** - Bisoprolol or Carvedilol • **Mineralocorticoid Receptor Antagonist (MRA)** – Spironolactone or Eplerenone (used in men reduced risk of gynecomastia). MRAs can be used providing potassium is <5.0mmol/L, if K >5.5mmol/L then can add Lokelma (Sodium Zirconium Cyclosilicate) 5g daily - discuss with HFNS) • **SGLT2 inhibitor** - Dapagliflozin or Empagliflozin (If patients are already on Empagliflozin for diabetes continue) • **Diuretics** • Furosemide – starting doses 40mg OD • Bumetanide • Metolazone (Cardiology advice only) • If K+ >5.5mmol/L can consider prescribing Lokelma (Sodoim Zirconium Cyclosilicate) ***For HF patients if eGFR is above 30mls/min, a rise in creatinine or fall in eGFR by up to 25% is acceptable to properly treat their heart. If more than this, contact the HFNS for advice. The first drug that should be temporarily stopped if a mild AKI is the MRA (Eplerenone/Spironolactone)*** **<u>Heart Failure with mildly reduced Ejection Fraction (HFmrEF) LVEF 41-49%</u>** Treat the same as HFrEF with the 4 pillars but instead of starting Entresto start ACEi/ARB **<u>Heart Failure with Preserved Ejection Fraction (HFpEF) LVEF ≥50-55% with symptoms of HF and raised NTproBNP</u>** • **SGLT2i** - Dapagliflozin or Empagliflozin (If patients are already on Empagliflozin for diabetes continue) • Treat hypertension; First line: ACEi e.g. Ramipril Second line: ARB e.g. Candesartan *(ARB to only be used if ACEi not tolerated e.g. bradykinin cough or angioedema. There is no additional benefit with Entresto in patients with LVEF >40%)* • Treat AF with rate control – Bisoprolol/Digoxin • Treat oedema with diuretics: Furosemide or bumetanide (metolazone Cardiology advice only)

Section 7	**Hyperlipidaemia** *Please see D&G Coronary Heart Disease and Stroke, Primary and Secondary Prevention Guideline* **Primary Prevention** Atorvastatin 20mg OD **Secondary Prevention** (Target LDLc <2mmol/L) 1st Line: Statins – Atorvastatin/rosuvastatin If statin intolerant, please follow NICE guidelines NICE Statin Intolerance Pathway 2nd Line: Ezetimibe 3rd Line: Bempedoic acid (Nilemdo®) or Bempedoic acid/Ezetimibe (Nustendi®) (Nustenidi is the same price as Nilemdo) Specialist Initiation: Evolocumab (Repatha®) Alirocumab (Praluent®) –IPTR required Inclisiran (Leqvio®)
Section 8	**Anti-Anginals** **Nitrates** Glyceryl Trinitrate Isosorbide Mononitrate *(MR preparations are more cost effective; prescribe generically as MR 25/50mg caps or 40/60mg tabs)* **Beta blocker** Bisoprolol **Ivabradine** if in sinus rhythm and heart rate >70bpm but if patient is in AF use Beta-blocker (+ digoxin if needed for rate control) **Calcium channel blocker** Amlodipine **Nicorandil** (*May be considered as add-on treatment or if intolerant to standard initial treatment)* If normal LV function can consider: Diltiazem (Adizem XL®, Zemtard XL® capsules) Verapamil (Securon®) **Acute coronary syndrome — NICE 185** SIGN 148. • Dual Antiplatelet therapy (consider PPI for gastro protection) • ACEi/ARB • Beta-blocker • Statin • GTN *Patients with acute coronary syndrome should receive dual antiplatelet therapy for six months. Longer durations may be used where the risks of atherothrombotic events outweigh the risk of bleeding. Shorter durations may be used where the risks of bleeding outweigh the risk of artherothrombotic events.* **Antiplatelet** Aspirin dispersible 75mg OD Clopidogrel 75mg OD Prasugrel 10mg OD – contraindicated in patients with a history of Stroke/TIA Ticagrelor 90mg BD – no longer being commenced but some existing patients may still be on it. *Please note if on a DOAC and requires triple therapy – antiplatelet choice should be Aspirin and Clopidogrel due to higher risk of bleeding with Prasugrel. If DOAC ever stopped and patient has had PCI needs to restart*

	Aspirin/Clopidogrel lifelong after stopping DOAC. **Sympathomimetics** *Sympathomimetics:* Adrenaline *Inotropic sympathomimetics:* Dobutamine Dopamine *Vasoconstrictor sympathomimetics:* Noradrenaline acid tartrate **Fibrinolytics** *Acute myocardial infarction:* Tenecteplase *Stroke thrombolysis* Alteplase
Section 9	**Oedema - Combination diuretics not recommended** **Loop diuretics** Furosemide Bumetanide **Thiazide and related diuretics** Metolazone (Cardiology advice only) **Aldosterone antagonist** Spironolactone – avoid in men where possible risk of gynecomastia

Back to Contents page

BNF Chapter 3 Respiratory System	
Section 3	**Airways Disease, Obstructive** See **NHS D&G Quit Your Way for smoking cessation**
Section 3.1	**Asthma - Chronic & Acute** Overview | Asthma pathway (BTS, NICE, SIGN) | Guidance | NICE **Chronic obstructive pulmonary disease** NICE guideline NG115 - Chronic obstructive pulmonary disease in over 16s: diagnosis and management; December 2018 **Quaity Prescribing Strategy for respiratory conditions** Respiratory conditions - quality prescribing strategy: improvement guide 2024 to 2027 - gov.scot (www.gov.scot) **Inhaler devices** ▪ The choice of device should be based on patient factors eg manual dexterity, inhaler technique. Where possible the most cost effective and sustainable device should be prescribed. ▪ Combination inhalers are preferred compared to individual components to aid compliance. ▪ Inhaler technique and compliance should always be checked before any switching of therapy. ▪ Patients with a metered dose inhaler (MDI) should have a spacer available for use for all occasions, but particularly for acute exacerbations. ▪ Consider using lower carbon footprint (CF) inhalers where clinically appropriate. You may wish to use the NICE decision aid, which considers the carbon footprint of inhalers as well as other issues affecting inhaler selection.https://www.nice.org.uk/guidance/ng80/resources/inhalers-for-asthma-patient-decision-aid-pdf-6727144573 **Bronchodilators** **SABA – Short acting beta$_2$ agonist bronchodilators** NOT to be prescribed alone or first line for asthma – ensure a preventer is also used (ICS or ICS/LABA as MART) and for new patients consider low dose ICS/formoterol (AIR) or MART • Easyhaler Salbutamol ® (DPI) £3.31 • Salbutamol CFC Free (MDI) (with spacer) £1.50 • Salamol Easi –Breathe® (BA) £6.30 • Salbutamol nebules £16.69/ 20-unit dose vials, Drug tariff Prescribing notes: *MDIs are the most cost-effective device but DPIs have a lower carbon footprint* *DPIs have a dose counter which may help monitoring overuse of salbutamol in asthma* *MDIs should be used with a spacer device to improve lung deposition.* *DPIs and MDIs with a spacer have equal lung deposition compared to nebulised salbutamol* **LABA – Long acting beta2 – agonist bronchodilators** LABAs are used as add on therapy if asthma not well controlled with inhaled corticosteroids and should be prescribed as a combination LABA/ICS. LABA alone should not be used in asthma. **Antimuscarinic bronchodilators** Asthma Spiriva Respimat® (tiotropium) Spiriva Respimat® (tiotropium) is accepted for use in Scotland as add-on maintenance bronchodilator treatment in adult patients with asthma who are currently treated with the maintenance combination of inhaled corticosteroids (≥800 micrograms budesonide/day or equivalent) and long-acting beta2 agonists and who experienced one or more severe exacerbations in the previous year. Moderate to high risk COPD **Combination LABA/LAMA** • Spiolto Respimat® (tiotropium/olodaterol) (SMI) • Anoro Ellipta® (umeclidinium/vilanterol) (DPI) *Prescribing notes:* *Use of combination bronchodilation can stop inappropriate escalation to inhaled corticosteroids in COPD and potentially reduce oral steroid and antibiotic use.*

The Respimat device (soft mist) is an alternative to a Dry Powder Inhaler device and can be used in patients unable to use/take a DPI. Before prescribing a Respimat device please ensure the patient (or a carer) can load the device and activate it. Use with a spacer (off-license) may be an option for some patients, for example, where a carer may be assisting,

The Respimat® inhaler is available as a reusable inhaler. This applies to all Respimat® products including Spiriva Respimat® and Spiolto Respimat®. The Respimat® inhaler will no longer need to be disposed of each month, instead the base will automatically detach after 60 puffs. A new refill cartridge containing 60 puffs can then be inserted into the device each month. The reusable inhaler device can be used with up to six cartridges. Healthcare professionals and patients can find further information at www.medical.respimat.com/uk

Corticosteroids (inhaled)
Asthma (adults)

- DPI Easyhaler version – Beclometasone (DPI) / Budesonide (DPI)
- Soprobec MDI (beclometasone) – (replaces Clenil)
- Kelhale MDI (beclometasone) – (replaces Qvar)

Prescribe by BRAND (products are not bioequivalent) – See table 1

Combination corticosteroids – *See table 1. Note: MART therapy possibilities highlighted in table 1*

- Fobumix Easyhaler® (DPI)
- Symbicort 100/6, 200/6 or 400/12
- Fostair Nexthaler ® (100/6 and 200/6 DPI) Luforbec ®100/6 and 200/6 MDI, Bibecfo ®100/6 and 200/6 MDI, Fostair® 100/6 and 200/6 (MDI)

For mild asthma, anti-inflammatory reliever therapy (AIR):

- Symbicort® 200/6 (DPI) – from age 12

Asthma paediatric patients

- Symbicort® 100/6 DPI – **from age 6**
- Seretide 50® MDI – **from age 5**

Combination ICS/LABA/LAMA (triple therapy) for COPD

- Trimbow® 88/5/9 DPI and available as 87/5/9 or 172/5/9 pMDI) *Note: High strength licensed for asthma only.*
- Trelegy® 100/62.5/25 Ellipta (DPI)

Table 1, showing total daily dose categories in asthma (Check licenses for different age groups, maintain at lowest possible ICS dose) *BTS/SIGN guideline September 2016*.

ICS ***Note: all MDIs should be delivered via a spacer to increase deposition and minimise adverse effects***	Low dose	Medium dose	High dose
Beclometasone dipropionate as Soprobec or Clenil MDI	400mcg	800mcg	1000 – 2000mcg
Beclometasone dipropionate as Kelhale MDI or QVAR MDI/Easi-breathe (BA)	200mcg	400mcg	800mcg
Easyhaler beclometasone (DPI)	400mcg	800mcg	1600mcg
Easyhaler budesonide (DPI)	400mcg	800mcg	1600mcg
Combination inhalers			
Fobumix Easyhaler ® (DPI)	80/4.5 one or two puffs twice a day 160/4.5 one puff twice a day	160/4.5 two puffs twice a day 320/9 one puff twice a day	320/9 two puffs twice a day 160/9 two puffs twice a day plus four puffs (MART)
Luforbec ® or Bibecfo ® MDI	100/6 one puff twice a	100/6 two puffs twice a day	100/6 two puffs twice a

	day	200/6 one puff twice a day	day plus four puffs if needed (MART) Or 200/6 two puffs twice a day
Fostair ® Nexthaler (DPI) or MDI, only if cannot tolerate alternatives	100/6 one puff twice a day	100/6 two puffs twice a day 200/6 one puff twice a day	100/6 two puffs twice a day plus four puffs if needed (MART) 200/6 two puffs twice a day
Symbicort (DPI)	200/6 One puff when required (AIR)	200/6 one puff twice a day plus four puffs if needed (MART)	200/6 two puffs twice a day plus four puffs if needed (MART)

Prescribing notes:

- *Formoterol containing - medium dose ICS combination inhalers can be used for Maintenance and Reliever Therapy in asthma (see SPC for detailed advice). Some are also licensed for Anti-inflammatory reliever (AIR) therapy in asthma (See GINA and individual SPC for full details).*
- *Luforbec, Bibecfo and Fostair are twice as potent as beclometasone*
- *All 200/6 strength MDIs are licensed only for asthma*
- *Luforbec contains different excipients to Bibeco (and Fostair) and so a change to Bibefco (or Fostair) may resolve issues that some patients have with Luforbec (e.g. cough).*
- *Treat asthma with lowest possible ICS dose to control symptoms, maintenance usually at lower dose combinations.*
- *Ensure ICS is appropriate in COPD (licensed in combinations) as many moderate COPD patients will benefit from LABA/LAMA combination alone.*
- *Inhaled corticosteroids in combination inhalers for COPD should only be prescribed for patients with an FEV1 of 50% predicted or less, who have two or more exacerbations needing treatment with antibiotics or oral corticosteroids a year. Eosinophils are a useful marker of people with COPD who will respond (>0.3 x 10^9 per L)*
- *Therapy should be reviewed every 3 months with a view to stepping down or up as per national guidance*
- *Those with both Asthma and COPD will require ICS treatment. There may be specialist initiation of ICS/LABA combination plus LAMA*
- *Inhalers should be prescribed by brand*
- *Note: there are some less expensive 'branded generic' alternatives where people cannot manage the formulary inhaler options*

Other corticosteroids

Prednisolone tablets (oral) or
Hydrocortisone (intravenous)

Prescribing notes:

- Dose/ duration: COPD = 30mg for 7-14 day course
  Asthma = 40/50mg for 5-day course
- *Prednisolone oral solution and soluble tablets are restricted to use in patients who are unable to swallow tablets. These preparations are considerably more expensive than the standard tablets.*
- *Time for onset for IV and oral hydrocortisone is no different, so there is little therapeutic gain if a patient has already started on an oral steroid prior to attendance.*
- *Normally short courses of steroids can be stopped abruptly but in certain cases they should be tapered – see BNF for more information.*
- *With regard to gastrointestinal effects, there is no advantage by using enteric coated prednisolone tablets; plain tablets should be used.*
- *Osteoprotection: Patients on or commencing high dose corticosteroid long-term (≥7.5mg per day of prednisolone or its equivalent for 3 months or more) should be offered bone protection with bisphosphonate.*

	▪ *Three or more short courses of oral steroids for exacerbations may require introduction of osteoprotection therapy.* ▪ *Patients taking lower doses of oral corticosteroids long-term should be considered for risk fracture assessment.* **Drug delivery devices** Aerochamber ® Plus Flow-Vu Anti-static spacer device *(compatible with all formulary inhalers)* Easychamber ® spacer device *(compatible with all formulary inhalers)* Medi Peak Flow Meter® (Medicare plus international) standard (60-800 litres/minute) and low range 30-400 litres/minute **Theophylline preparations (specialist initiation only)** • Oral: Uniphyllin continus® • Aminophylline Injection (hospital use only) *Prescribing notes:* ▪ *Smoking cessation may increase theophylline levels* ▪ *Theophylline should be prescribed by brand due to varying bioavailability* ▪ *Routine therapeutic monitoring is not required unless checking compliance or for toxicity* **Drugs for respiratory diseases** Monoclonal antibodies – all specialist initiation and as per SMC advice Benralizumab (Fasenra®) injection Dupilumab (Dupixent) injection Mepolizumab (Nucala®) Omalizumab (Xolair®) Tezepelumab **Leukotriene receptor agonist** Montelukast tablets *Prescribing notes: Not licensed in COPD*
Section 2	**Allergic conditions** **Antihistamines** Cetirizine (non-sedating) Chlorphenamine (sedating) Fexofenadine **Note Allergic Emergencies –** under review see BNF 8.1a
Section 3	**Conditions affecting sputum viscosity** **Mucolytics** NACSYS ® effervescent tablets (contains 600mg acetylcysteine per tablet) *Prescribing notes:* ▪ *Prescribe by brand to ensure most cost effective preparation.* ▪ *Mucolytics should be reviewed after 4 weeks to assess if there has been any clinical benefit.* ▪ *Patients prescribed carbocisteine capsules should be reviewed for continued benefit, if not then it should be stopped. If appropriate to continue consider switching to NACSYS/reducing to maintenance dose/using "when required".*
Section 4	**Cough and congestion** There is little evidence to support the use of cough suppressants. See cough guidance on DG Refhelp
Section 5	**Idiopathic pulmonary fibrosis** **Antifibrotics –** specialist initation as per SMC Nintedanib (Ofev®) Pirfenidone (Esbriet®)

Back to Contents page

BNF Chapter 4 Central Nervous System	
Section 1	**Mild to moderate Alzheimer's disease** : Donepezil tablets **Severe Alzheimer's disease**, Memantine tablets/ oral solution Also for moderately severe who are intolerant or have contraindications to cholinesterase inhibitors: **Dementia other than Alzheimer's Disease**: please seek specialist advice. NICE TA 217: Donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer's disease March 2011, updated June 2018
Section 2.1	**Epilepsy** **Initiation and withdrawal of therapy must only be managed by a specialist** SIGN 143: Diagnosis and management of epilepsy in adults, May 2015, revised 2018. NICE [NG217]: Epilepsies in children, young people and adults **Sodium valproate is NOT suitable for woman of child bearing age.** Specialists must independently consider and complete Pregnancy Prevention Programme to demonstrate that there is no other effective treatment for all male and female patients under the age of 55 years, or that there are compelling reasons that the reproductive risks do not apply. Please see MHRA guidelines below. **Focal onset seizures** *Specialist advice only:* 1st line monotherapy Lamotrigine or levetiracetam – suitable in women of child bearing age 2nd line monotherapy Carbamazepine MR (prescribe by BRAND) or oxcarbazepine Zonisamide **Generalised epilepsy** Lamotrigine or levetiracetam - suitable in women of child bearing age *Prescribing note* *levetiracetam is not currently licensed for use as monotherapy in generalised epilepsy but may be considered if lamotrigine not tolerated and patient of childbearing age* **2.2 Status epilepticus** ***Step 1*** *(in community):* Midazolam buccal/intranasal (Buccolam) Lorazepam IV/Diazepam IV ***Step 2*** *(in hospital):* Midazolam buccal/intranasal (Buccolam) Lorazepam IV ***Step 3*** *(in hospital/CCU):* Levetiracetam injection Phenytoin injection Sodium valproate injection (not suitable for women of CBP) *Prescribing Notes* • *The choice of medication is determined by the type of seizure, and age and sex of patient; see SIGN No.143* • *Sodium valproate should never be started in any woman or girl unless alternative treatments are*

	not suitable • *Sodium valproate must not be used in any woman or girl able to have children unless she has a pregnancy prevention programme in place* • *Follow latest advice for contraceptive use for men prescribed sodium valproate to avoid exposure pre and post conception* • *Topiramate is contra-indicated in pregnancy and in women of childbearing potential unless the conditions of a Pregnancy Prevention Programme are fulfilled* • *Refer to MHRA guidance:* MHRA Drug Safety Update: Valproate medicines (Epilim, Depakote): contraindicated in women and girls of childbearing potential unless conditions of Pregnancy Prevention Programme are met: April 2018 MHRA Drug Safety update: Valproate medicines (Epilim, Depakote): Pregnancy Prevention Programme materials online https://www.gov.uk/government/news/mhra-advises-men-taking-valproate-and-their-partners-to-use-effective-contraception https://www.gov.uk/drug-safety-update/topiramate-topamax-introduction-of-new-safety-measures-including-a-pregnancy-prevention-programme MHRA Drug Safety Update: MHRA DSU: Antiepileptic drugs: Updated advice on switching between different manufacturers' products, Nov 2017 The MHRA have divided anti-epileptic drugs into 3 categories in order to determine whether it is necessary to maintain continuity of the same brand. **Category 1** – Ensure that the patient is maintained on a specific manufacturer's product: carbamazepine, phenobarbital, phenytoin, primidone **Category 2** - Base the need for continued supply of a particular manufacturer's product on clinical judgement and consultation with patient and/or carer, taking into account factors such as seizure frequency and treatment history. Take into account patient/carer-related factors such as their negative perceptions about alternative products and/or other issues related to the patient should also be taken into account: clobazam, clonazepam, eslicarbazepine, lamotrigine, oxcarbazepine, perampanel, retigabine, rufinamide, topiramate, valproate, zonisamide **Category 3** – The potential for clinically relevant differences to exist between different manufacturers' products is considered to be extremely low. However, consider other patient/carer-related factors, such as negative perceptions about alternative products and/or other issues related to the patient (e.g. patient anxiety, risk of confusion or dosing errors): brivaracetam, ethosuximide, gabapentin, lacosamide, levetiracetam, pregabalin, tiagabine, vigabatrin This guidance only relates to the treatment of epilepsy – it does not apply to the use of these drugs for other indications eg neuropathic pain.
Section 3	**Mental Health Disorders** To know more about mental health conditions and their treatment, and to obtain printable patient information leaflets go to: www.choiceandmedication.org/nhs24/
Section 3.1	**Anxiety** **Acute anxiety state** Diazepam tablets 2mg **short term treatment only of acute crises** – *(ensure appropriate review)* **Generalised anxiety disorder and panic disorder:** *www.nice.org.uk/guidance/cg113* **Social Anxiety disorder:** *www.nice.org.uk/guidance/cg159*

Obsessional-compulsive disorder and body dysmorphic disorder:
www.nice.org.uk/guidance/cg31

Post-traumatic stress disorder:
www.nice.org.uk/guidance/ng116

Eating disorders:
www.nice.org.uk/guidance/ng69

Treatment of anxiety (and related) disorders:

First line – Individualised self help (CBT based) / Psychoeducation

Second line – High intensity psychological intervention / CBT etc

For adults whose anxiety disorder symptoms only partially respond to psychological interventions consider adding medication:

Benzodiazepines are associated with poorer outcomes in the long term and should not be prescribed for the treatment of anxiety except as a short-term measure during crises.

Pharmacological treatment of anxiety: (Note: different antidepressants have differing product licenses for the anxiety disorders, see product literature for details)

Sertraline
Fluoxetine in OCD / BDD; tends to require higher doses than depression
Alternative SSRI
SNRI: Duloxetine or Venlafaxine

Take into account (and discuss with the individual) the following factors:

- tendency to produce a withdrawal syndrome (especially Paroxetine and Venlafaxine)
- side-effect profile and the potential for drug interactions
- risk of suicide (especially in under 30 year olds) and likelihood of toxicity in overdose particularly during dose titration
- the risk of activation with SSRIs and SNRIs, with symptoms such as increased anxiety, agitation and problems sleeping
- Person's prior experience of treatment with individual drugs (particularly adherence, effectiveness, side effects, experience of withdrawal syndrome and the person's preference).
- Increased risk of bleeding associated with SSRIs, particularly for older people or people taking other drugs that can damage the gastrointestinal mucosa or interfere with clotting (for example, NSAIDS or aspirin). Consider prescribing a gastroprotective drug in these circumstances.

Drug treatments of PTSD for adults (Specialist advice only)
Venlafaxine or sertraline

Consider antipsychotics such as risperidone, in addition to psychological therapies to manage symptoms for adults with a diagnosis of PTSD if:

- they have disabling symptoms and behaviours, for example severe hyperarousal or psychotic symptoms **and**
- their symptoms have not responded to other drug or psychological treatments.

Nightmares in PTSD can respond to prazosin or doxazosin given at bedtime (specialist advice only)

Anxiety disorders can take 8-12 weeks to respond to pharmacological treatments. Review the effectiveness and side effects of the drug every 2–4 weeks during the first 3 months of treatment and every 3 months thereafter until stable.

Pregabalin:
Evaluate patients carefully for a history of drug abuse before prescribing and observe patients for development of signs of abuse and dependence. Discontinue, gradually, if ineffective at 3 months.

	Propranolol is not recommended by NICE guidance for management of anxiety. Propranolol can only help symptoms of anxiety such as palpitations and sweating, it does not mitigate the anxiety itself and has significant potential for sleep disorders and depression. If used it should be used only as needed for these symptoms and reviewed for effectiveness and adverse effects, with consideration of discontinuation once a treatment for the underlying condition is in place. Evidence does not support its use in panic disorder. Avoid use in those with Asthma, and COPD using beta-agonists. **Specialist advice only:** Antipsychotics Sedating antihistamines Imipramine / Clomipramine for OCD / BDD MAOIs e.g. Phenelzine / Moclobemide Propranolol SR for PTSD Lisdexamfetamine in binge eating disorder
Section 3.2	**Attention deficit hyperactivity disorder (ADHD): Specialist initiation** *NICE: Attention deficit hyperactivity disorder: diagnosis and management* [NG87] Published March 2018 updated: Sept 2019 (Children and adults) www.choiceandmedication.org/nhs24/ **Medication choice – children aged 5 years and over and young people** (Note: use of medicines for treating ADHD is off-label in children aged < 5). 1. Methylphenidate short or long acting. Prescribe methylphenidate XL as recommended by specialist team. Supplies of particular brands of methylphenidate XL may be unpredictable, where possible please maintain patient on a bioequivalent brand if usual brand is not available. 2. Lisdexamfetamine if methylphenidate insufficiently effective 3. Dexamfetamine if symptoms are responding to lisdexamfetamine but who cannot tolerate the longer effect profile. 4. Atomoxetine or Guanfacine if: o they cannot tolerate methylphenidate or lisdexamfetamine **or** o their symptoms have not responded to separate 6-week trials of lisdexamfetamine and methylphenidate, having considered alternative preparations and adequate doses 5. Consider tertiary referral **Medication choice – adults** (Note: product licenses vary for adults between preparations and if pre-existing or new diagnosis) 1. Lisdexamfetamine, or methylphenidate short or long acting (or combination). Prescribe methylphenidate XL as recommended by specialist team. Supplies of particular brands of methylphenidate XL may be unpredictable, where possible please maintain patient on a bioequivalent brand if usual brand is not available. 2. Switch to alternative from above if 6-week trial produces insufficient symptom control. 3. Atomoxetine if: • they cannot tolerate lisdexamfetamine or methylphenidate **or** • symptoms have not responded to separate 6-week trials of lisdexamfetamine and methylphenidate, having considered alternative preparations and adequate doses. **ONLY on advice of tertiary specialist ADHD service:** • guanfacine for adults • clonidine for children with ADHD and sleep disturbance, rages or tics • atypical antipsychotics in addition to stimulants for people with ADHD and coexisting pervasive aggression, rages or irritability **Medication choice – people with coexisting conditions** Offer the same medication choices to people with ADHD and anxiety disorder, tic disorder or autism spectrum disorder as other people without ADHD. For person with ADHD experiencing an acute psychotic or manic episode: • stop any medication for ADHD • Consider restarting or starting new ADHD medication after the episode has resolved, considering the individual circumstances, risks and benefits of the ADHD medication.

	Be cautious about prescribing stimulants for ADHD if there is a risk of diversion for cognitive enhancement, appetite suppression or a risk of stimulant misuse or diversion. After titration and dose stabilisation, prescribing and monitoring of ADHD medication can be carried out within primary care. *When methylphenidate medication is not available due to ongoing supply issues please maintain patients on a similar formulation to avoid destabilisation.*
Section 3.3	**Bipolar disorder and mania** Sodium valproate should never be started in any woman or girl unless alternative treatments are not suitable. If it is prescribed a Pregnancy Prevent Programme **must** be in place. Follow latest advice for contraceptive use for men prescribed sodium valproate to avoid exposure pre and post conception. NICE CG185: Bipolar disorder: assessment and management *MHRA Drug Safety Update April 2018 Valproate medicines (Epilim▼, Depakote▼): contraindicated in women and girls of childbearing potential unless conditions of Pregnancy Prevention Programme are met MHRA Drug Safety update: Valproate medicines (Epilim, Depakote): Pregnancy Prevention Programme materials online https://www.gov.uk/government/news/mhra-advises-men-taking-valproate-and-their-partners-to-use-effective-contraception **Pharmacological interventions for mania/hypomania** Seek specialist service advice, (Acute Mania would generally be managed in hospital, hypomania may be managed at home with support). 1. **If taking an antidepressant consider stopping this** 2. Offer an antipsychotic (**haloperidol, olanzapine, quetiapine or risperidone**) if not already taking one. If already taking one consider if the dose should be increased or the medication switched. 3. If poorly tolerated switch to an alternative antipsychotic within the list above. 4. Consider adding **lithium** (prescribe by brand) if appropriate, optimise treatment using lithium blood level monitoring. 5. Consider adding **sodium valproate** (and not woman of CBP) Insomnia is both a symptoms and trigger for mania, consider if a hypnotic is indicated. Lamotrigine is not helpful in managing mania **Pharmacological treatment of bipolar depression;** (with specialist advice) **consider:** • Fluoxetine +/- (olanzapine or quetiapine) • Olanzapine monotherapy • Lamotrigine monotherapy • If already taking lithium, optimise treatment using lithium blood level monitoring. • If not already taking lithium and still unwell, consider adding lithium and optimising treatment using lithium blood levels. • If already taking sodium valproate* (and not a woman of CBP) consider increasing the dose within the therapeutic range **Pharmacological prophylaxis of relapse in Bipolar disorder;** (with specialist advice)**:** Consider, with the individual, the medication that has been helpful during episodes of mania or bipolar depression and if to continue this longer term. If not already taking offer lithium as a first-line, long-term pharmacological treatment for bipolar disorder and:

	• if lithium is ineffective, consider adding valproate* (if not woman of CBP) • If lithium is poorly tolerated, or is not suitable (for example, because the person does not agree to routine blood monitoring), consider valproate* (if not woman of CBP) or olanzapine, or quetiapine. Consider the long term adverse effects of the medication and plan for physical health monitoring appropriate to the medication, including blood level monitoring for lithium.
Section 3.4	**Depression** *For mild to moderate depression; self help – drug treatment is not a 1st line option.* See: NHS Inform website for topics, for self help guides within individual topics: https://www.nhsinform.scot/illnesses-and-conditions/mental-health **Pharmacological treatment of moderate to severe depression** *See dg.prescribingmatters.co.uk/guidelines/CNS* **First line:** Fluoxetine Sertraline **Second line:** Alternative SSRI Duloxetine Mirtazapine Venlafaxine standard release tablets, (XL preparations are less cost-effective and should only be considered where standard release is not suitable). **Recurrence of depression:** previously successful anti-depressant **Antidepressants for treatment of anxiety disorders** see 3.1 *Formulary note: Fluvoxamine is NOT recommended for use in NHS D&G*
Section 3.6	**Psychoses and schizophrenia** NICE Psychosis and schizophrenia in adults: prevention and management: [CG178] Published Feb 2014 Last update March 2014 *https://www.nice.org.uk/guidance/cg178* **Treatment of psychosis** (specialist initiation only) An antipsychotic appropriate to the patient's needs and characteristics **MHRA Drug safety update -** Clozapine and other antipsychotics: monitoring blood concentrations for toxicity – **Antipsychotics and dementia** (on specialist advice only) Before prescribing consider Stress and Distress and contacting the IDEAS team unless prescribing on specific advice of specialist services. Review regularly to consider dose reduction/discontinuation Risperidone - *only licensed for a maximum of 6 weeks use in the management of Behavioural and Psychological Symptoms of Dementia (BPSD)* **Antipsychotic depot injections** (specialist initiation only) *Formulary note: Where quetiapine is used it should be prescribed as standard release tablets*

Section 4	**Movement disorders**
Section 4.1	**Dystonias and other involuntary movements**
Section 4.2	**Parkinson's disease** *Drugs used in idiopathic Parkinson's disease and related disorders are on specialist advice only* Dopaminergic drugs used in Parkinson's disease **Dopamine- agonists** Ropinirole Pramipexole Ropinirole XL prescribe as Ipinnia XL® Pramipexole MR prescribe as Pipexus prolonged release tablets® In patients who are nil by mouth or who have absorption problems, Rotigotine patches may be considered as a treatment option **Dopamine containing drugs** Co-beneldopa **(**Madopar®) Co-careldopa (Sinemet®) Stanek® (Co-careldopa/Entacapone) **COMT inhibitor** Entacapone **MAOB inhibitor** Selegiline
Section 5 **Section 5.1**	**Nausea and labyrinth disorders** **Antihistamines** Cyclizine Promethazine (sedating) See also National Palliative Care Guidance **Phenothiazine and related drugs** Levomepromazine Prochlorperazine **Dopamine receptor antagonists** Metoclopramide Domperidone *Drug Safety Update: Metoclopramide: risk of neurological adverse effects Dec 2014* *Drug Safety Update: Domperidone for nausea and vomiting: lack of efficacy in children; reminder of contraindications in adults and adolescents Dec 2019* **5HT3 receptors antagonists** Ondansetron **Antimuscarinics** Hyoscine hydrobromide *Prescribing points;* **Motion sickness***: Recommend patient purchases OTC treatment from community pharmacy* **Nausea and vomiting in migraine (See MHRA advice above)** Metoclopramide **Gastric stasis**: Metoclopramide **Nausea & vomiting in pregnancy**: Cyclizine **Opioid-induced**: Haloperidol – See also National Palliative Care Guidance

	Other drugs for Meniere's Disease: Betahistine *Note betahistine is licensed for treating hearing loss, tinnitus, and vertigo associated with Meniere's. Evidence regarding its use for Meniere's disease is inconclusive. See clinical knowledge summary.*
Section 6	**Analgesics** Dysmenorrhoea see BNF Chaper4.6 Musculoskeletal and joint pains (including gout) see chapter 10 Migraine, see chapter 4.5.1 *NOTE: When prescribing paracetamol or any paracetamol containing formulation for an individual weighing <50kg, the dose* **must** *be adjusted such that it does not exceed 500mg of paracetamol four times a day (2g/day)* **Tramadol is not approved for use in NHS D&G unless on Specialist Advice. If tramadol is prescribed the possibility of seratoninergic drug combinations must be considered.** *Step 1:* **mild pain** Paracetamol +/- NSAID (Ibuprofen) Refer to section 10.4 for topical NSAIDs *Step 2:* **moderate pain** Codeine Dihydrocodeine *Consider combinations as appropriate – Only after trial of Step 1* Co-codamol 30/500 *(prescribe as tablets/caplets)* ± NSAID (Ibuprofen) *Step 3: severe pain* **OPIATES SHOULD BE PRESCRIBED BY BRAND** Morphine is 1st line Standard release: Sevredol®/Oramorph Liquid Modified release: Zomorph® caps ± Paracetamol ± NSAID (Ibuprofen) Morphine should be first choice opiate unless there are specific indications for an alternative opiate Oxycodone is 2nd line Standard release: Shortec® Capsules/ Oxynorm Liquid Modified release Oxypro® Tablets +/- Paracetamol +/- NSAID *Opiates of choice for patients with significant renal impairment/clinical indication for patch:* *Buprenorphine Transdermal Patch* *Fentanyl Transdermal Patch* Opiodur® **Transdermal fentanyl patches for non-cancer pain: do not use in opioid-naive patients** Breakthrough pain relief is appropriate for cancer related pain, in chronic non-malignant pain avoid the use of opiates.

	Opiods: risk of dependence and addiction **For palliative care only** See current palliative care guidelines
Section 6.1	**Headache**
Section 6.1	**Migraine** **For further advice and prescribing information, see:** SIGN 155 Pharmacological management of migraine 2023 update DGRefHelp: Migraine in adults | Right Decisions **Treatment of the acute migraine attack** **Mild to moderate migraine** Aspirin Ibuprofen Paracetamol – if NSAIDs are contraindicated/not tolerated, or in combination with aspirin or NSAID **Nausea due to migraine** Metoclopramide – maximum treatment duration should not exceed 5 days Prochlorperazine **MHRA Drug Safety Update December 2014** Metoclopramide: risk of neurological adverse effects - GOV.UK **Severe migraine** Sumatriptan tablets Rizatriptan orodispersible tablets (note: orodispersible tablets are more cost effective) *Consider the possibility of drug-induced headache (especially with codeine)* The combination of an analgesic and metoclopramide can be as effective as a triptan Oral calcitonin gene-related peptide (CGRP) inhibitors Rimegepant – for treatment of acute migraine in patients who have had prior failure on at least two triptans or triptans are contra-indicated **Migraine prophylaxis (primary care)** Propranolol Amitriptyline – unlicensed use Candesartan – unlicensed use (avoid in pregnancy and breastfeeding) Topiramate – contraindicated in pregnancy and in women of childbearing potential unless the conditions of a pregnancy prevention programme are fulfilled **MHRA Drug Safety Update June 2024** Topiramate (Topamax): introduction of new safety measures, including a Pregnancy Prevention Programme - GOV.UK Rimegepant – treatment of episodic migraines in patient who have had prior failure on three or more migraine preventative treatments Atogepant – treatment of chronic or episodic migraine who have had prior failure on three or more migraine preventative treatments **Migraine prophylaxis (specialist)** Botulinum toxin A (Xeomin) - licensed for treatment of chronic migraines only **CGRP monoclonal antibodies (supplementary guideline in progress)** Erenumab – approved for chronic migraine only Fremanezumab Galcanezumab Eptinezumab ***MHRA warning metoclopramide*** *– only licensed for short term use up to 5 days due to risk of potentially serious neurological side effects*

	Drug treatment of cluster headache acute attacks Sumatriptan subcutaneous **Prophylaxis -** see specialist
Section 6.2	**Neuropathic Pain** 1st line Amitriptyline (titrate to adequate dose) 2nd line Gabapentin (titrate dose up to at least 1200mg a day) 3rd line Duloxetine Pregabalin *(prescribe as capsules)* *Care should be taken when co-prescribing these medications with opiates due to increased risk of significant side effects.*
Section 7	**Sleep disorders**
Section 7.1	**Insomnia** Before prescribing consider contributory factors which may be causing insomnia e.g. 1. Poor sleep hygiene 2. Concurrent medications contributing to sleep disturbance (or to take advantage of sedative side effects) 3. Underlying conditions e.g. depression, sleep apnoea, pain **Sleepio** is a digital app which can be used to help manage insomnia disorder for adults aged 18 years and older, as an adjunct to their usual medical care. https://info.sleepio.com/suitability **Pharmacological treatment of insomnia in adults** (*Seek specialist advice for insomnia in children.)* *Acute prescriptions only- short term relief of symptoms,* ***max 4 weeks*** *–* *Advise intermittent use (e.g. maximum 2 consecutive days) to reduce development of tolerance.* **Zopiclone** *(NICE advises to use drug with lowest acquisition cost)* Zolpidem if adverse effects to Zopiclone. Diazepam Promethazine *Hypnotics started in hospital should not normally be continued on discharge (except palliative care)* Note: Sedating antidepressants are NOT appropriate to use as hypnotics due to potential for side effects and toxicity. *Formulary note: Nitrazepam, Lormetazepam and Loprazolam are NOT recommended in NHS D&G.* *See guideline above for advice on switching benzodiazepine to diazepam equivalent.*
Section 7.2	**Narcolepsy** **CNS stimulants:** *secondary care advice only* **Narcolepsy**: seek specialist advice
Section 8	**Substance dependence**
Section 8.1	**Alcohol withdrawal symptoms: Inpatients** Refer to clinical handbook **Drug withdrawal symptoms**: **Inpatients** Refer to clinical handbook **Diazepam** Lorazepam in special patient groups e.g. liver impairment, respiratory depression, frail elderly **Alcohol withdrawal symptoms: Outpatients** (specialist advice) **Chlordiazepoxide** **Alcohol withdrawal symptoms in pregnancy:** Seek specialist advice; usually chlordiazepoxide

	Maintenance of abstinence from alcohol **Disulfiram** – ECG and baseline LFTs with δgt & AST needed. ECG to be organized by initating prescriber. Normal dose is 200mg daily. **Ongoing need for disulfiram should be assessed every 6 months. Consider supervision requirements** **Acamprosate calcium** (*review annually for need to continue)* **Naltrexone** (ongoing need must be assessed) **Assisting Controlled drinking** **Naltrexone** (ongoing need must be assessed) **Nalmefene** (ongoing need must be assessed) Baclofen (off-label, Specialist initiation only) Topiramate (off-label, Specialist initiation only) - Caution required in women of childbearing age, see MHRA guidance. Two prescribers must have decided this is the most appropriate option and a Pregnancy Prevention Plan completed **Vitamin supplementation** **Pabrinex®** *IV: 1 pair TDS for 3 days then review,* **Thiamine** 50mg three times daily. **Stop at 6 months if abstinent**
Section 8.2	**Nicotine dependence** Smokers must be prescribed NRT or varenicline as part of a smoking cessation quit attempt supported by Quit Your Way or the Community Pharmacy Smoking Cessation Service. The decision regarding the use of NRT versus varenicline will be made during the initial assessment of the patient and will be determined by the patient's clinical suitability and individual needs i.e. the pharmacotherapy that will be most likely to result in a successful quit attempt for the individual when provided along with support from the smoking cessation services. The choice of which NRT product(s) to be used should reflect the most up to date Smoking Cessation Guidance and the specified preferred products, which will take in to account current National NRT Framework Arrangements.
Section 8.3	**Opioid dependence** Opiate substitution Therapy (OST) A drug diary and urine sample is required prior to commencing treatment. Referral to NHS D&G Drug and Alcohol Service should be made. **Espranor®** (Buprenophine oral lyophilisate - mg) (Specialist initiation only) Buprenorphine sublingual - mcg (Specialist initiation only) **Buvidal®** (Long Acting Injectable buprenorphine) (Specialist initiation only) **Methadone 1mg/1ml** (Specialist initiation only). **Opiate antagonists** **Naltrexone** (Specialist initiation only) - baseline LFTs with GGT & AST needed. (ongoing need must be assessed). **Emergency Opiate Overdose Treatment** Prenoxad 1mg/ml pre-filled syringe Nyxoid 1.8mg nasal spray Accord 1.26mg nasal spray
Other	**Adjunctive treatments for neurodevelopmental disorders in children and adolescents** **Melatonin** Specialist initiation Melatonin 2mg modified-release tablets Melatonin 3mg immediate release tablets Adalflex® tablets Melatonin 1mg/ml oral solution *Prescribing notes* *If swallowing difficulties consider Adaflex® brand which is available in 1mg, 2mg, 3mg, 4mg and 5mg tablets. Adaflex® tablets can be crushed and mixed with water directly before administration.* *Liquids: Many melatonin liquids are considered unsuitable for use in children under 6 years of age due*

	to their excipient content. Their use is also off label in this age group. *Liquids must only be considered when unable to swallow and the crushing of Adaflex® is unsuitable.* *Melatonin **capsules** are expensive and not licensed in children therefore their use is non formulary*

Back to Contents page

BNF Chapter 6 Endocrine System	
1.0 Antidiuretic hormone disorders **2.0 Corticosteriods responsive conditions** **3.0 Diabetes mellitus and hypoglycaemia** **4.0 Disorders of bone metabolism** **5.0 Dopamine responsive conditions** **6.0 Gonadotrophin responsive conditions** **7.0 Hypothalamic and anterior pituitary hormone related disorders** **8.0 Sex hormone responsive conditions** **9.0 Thyroid disorders**	
Section 1	**Antidiuretic hormone disorders** Posterior pituitary hormones and antagonists – specialist use only
Section 1.1	**Diabetes insipidus - specialist use only** Desmopressin nasal spray Desmopressin tablets Desmopressin sublingual tablets Desmopressin injection
Section 1.2	**Syndrome of inappropriate antidiuretic hormone secretions - specialist use only** Tolvaptan
Section 2	**Corticosteroid responsive conditions** For inpatients refer to the D&G clinical handbook>endocrine> 'Hyperglyceamia & Steroids' for inpatient management for all patients on high dose steroids Primary care management – under discussion National Patient Safety Alert Card Addisons Disease link to nhs steroid card Fludrocortisone Hydrocortisone Prednisolone 5mg or 5mg soluble tablets (avoid 25mg tablets as not cost effective) Dexamethasone (use soluble tablets in place of liquid as more cost effective) Methylprednisolone sodium succinate
Section 2.1	Cushing's syndrome and disease refer to specialist services
Section 3.1	**Diabetes mellitus and hypoglycaemia** *Prescribing note* *Oral hypoglycaemic agents which cause<5mmol/mol reduction in HbA1c after 6 months should be discontinued and alternative tried. For local guidance see DGRefHelp/Diabetes* **Biguanides** Metformin maximum recommended dose is 2g daily Metformin MR – *a trial of up to 6 months could be considered in patients with severe GI side effects who would otherwise discontinue immediate release. Dose is usually once daily with main meal of the day.* • *Metformin may cause gastro-intestinal adverse effects; it should be started at low dose and taken with or after meals, and the dose gradually increased if tolerated* • *Hypoglycaemia is not a problem with metformin monotherapy* • *Sick day rules apply to metformin. Supply the patient with appropriate advice* • *Be aware of the possibility of Vitamin B12 deficiency associated with treatment with Metformin* • *Combination tablets containing metformin + a DPP4i or an SGLT2i may offer a lower tablet burden and lower cost option for patients suitable for the fixed doses*

SGLT2 inhibitors
Dapagliflozin
Empagliflozin - initiate if eGFR>60ml/min

In patients with type 2 diabetes and established cardiovascular disease, SGLT2 inhibitors with proven cardiovascular benefit (currently empagliflozin, dapagliflozin and canagliflozin) should be considered (SIGN 154).

- *There is a risk of euglycaemic ketoacidosis with SGLT2 inhibitors; provide clear guidance to stop treatment if intercurrent dehydrating illness – advise on sick day rules*
- *Omit on the morning of surgery then restart when drinking and eating again*
  Drug Safety Update MHRA March 2020 SGLT2 inhibitors monitor ketones in blood during treatment interruption for surgical procedures or acute serious medical illness
- *The glucose lowering efficacy of dapagliflozin and empagliflozin is dependent on renal function, and is reduced in patients with eGFR < 45ml/min. If eGFR falls below 45 ml/min, additional glucose lowering treatment should be considered in patients with type 2 diabetes mellitus.*
- *Patients on SGLT2 inhibitors should be given advice on genitourinary infections and should be used with caution in patients with a history of recurrent genito-urinary tract infection.*
- *Avoid if active foot disease or low carbohydrate diet*
  treatment interruption for surgical procedures or acute serious medical illness

Sulfonylureas
Gliclazide 80mg tablets
Glimepiride

- *Sulfonylureas should be taken before meals.*
- *Patients should be informed that sulfonylureas can cause hypoglycaemia.*
- *DVLA regulations on testing should discussed*

Dipeptidylpeptidase-4 inhibitors (DPP4i)
Sitagliptin
Linagliptin -requires no dosage adjustment in renal failure and can be used in end stage renal failure

- *Patients should be counselled to report any signs of acute pancreatitis*

Glitazones
Pioglitazone

- Pioglitazone is *contra-indicated in patients with heart failure, active bladder cancer or a history of bladder cancer*
- *Use with caution in patients with other cardiovascular diseases and in the elderly*
- *Advise patient of risk of osteoporosis and bladder neoplasia*
- *Investigate macroscopic haematuria).*

Incretin mimetics

Patients should be reviewed at 6 months and only continue therapy in those with a ≥5 mmol/mol reduction in HbAlc and/or ≥3% reduction in body weight.

Semaglutide oral ▼ (Rybelsus)

- *It can be initiated in primary care based on SMC restrictions (www.scottishmedicines.org.uk)*
- *Oral semaglutide is taken on an empty stomach with a small glass of water avoiding food, drink and other oral medicines for 30mins. Adherence to these instructions is important for efficacy*
- *Ensure HbA1c and weight reviewed at 6 months*
- *If glycaemic targets have not been met on oral semaglutide an injectable GLP-1 agonist is likely to be a more effective alternative.*
- *GLP-1 agonists are associated with gastro-intestinal side-effects; use with caution if previous pancreatitis*
- *Semaglutide can worsen diabetic retinopathy, caution in pre-existing retinopathy*

- *Patients should be counselled to report any signs of acute pancreatitis*

Semaglutide once weekly (Ozempic®)
Exenatide once weekly (Bydureon®)

Insulins

- *Insulin should be initiated on specialist advice only*
- *Choice depends on the needs of the individual patient, taking into consideration lifestyle, age, preference and capabilities*
- *Type of insulin, device and needle size should be specified*
- *Care should be taken to write the brand name in full*
- *Insulins are not interchangeable.*
- *When prescribing insulin on a discharge or out-patient prescription, the word unit must be typed/ written in full.*
- *For sustainability penfill cartridges should be considered 1st line*

Short acting Insulins

Humalog® cartridges 3ml
Humalog® Kwikpen pre-filled pen
Humalog® 10ml vial
Admelog Sanofi® cartridges 3ml▼ (formerly Insulin lispro)
Admelog Sanofi® vials 10ml▼
Admelog Sanofi® pre-filled pen▼
Novorapid® penfill cartridges 3ml
Novorapid® pre-filled pen
Novorapid® 10ml vials
Humulin S® 3ml cartridges
Apidra® Solostar pre-filled pen
Apidra® 10ml vial

Ultra short acting insulin
Fiasp ®Penfill catrridge 3ml▼
Fiasp ®FlexTouch pre-filled pen▼
Fiasp ® vial 10ml▼

Intermediate and long-acting insulins
Humulin I® cartridges 3l
Humulin I® Kwikpen pre-filled pen

Insulin Analogues – for restricted use as per SMC
Abasaglar® cartridge 3ml
Abasaglar® Kwikpen pre-filled pen
Levemir® penfill cartridge 3ml
Levemir® Flexpen pre-filled pen
Lantus® injection cartridge 3ml
Lantus® Solostar pre-filled disposable pen
Tresiba ® Penfill 100 units/mL solution for injection in cartridge
Tresiba ®FlexTouch 100 units/mL solution for injection in pre-filled pen

Biphasic insulins
Novomix® 30 Penfill cartridges
Novomix® 30 Flexpen pre-filled pen
Humalog® Mix25 cartridge 3ml
Humalog® Mix25 Kwikpe
Humalog® Mix50 cartridge
Humalog® Mix50 Kwikpen pre-filled pen
Humulin M3® Kwikpen pre-filled pen

	Humulin M3® cartridge 3ml
Section 3.1a	**<u>Diabetes, diagnosis and monitoring</u>** **Blood monitoring** Self blood glucose monitoring in Diabetes should be undertaken only: • when insulin is prescribed • to monitor for hypoglycaemia due to treatment with sulphonylureas *Meters cannot be prescribed; strips to be read only with the appropriate meter. Please see table.* *Blood testing for ketones should only be undertaken on specialist advice* *(Supply 10/prescription, pregnant women may need more)*

Meter	Patient Group	Compatible Glucose Strips	Compatible Ketone Strips
CareSens Dual	Type 1	Caresens Pro	Ketosens
GlucoRx Q Accu-chek Instant	Type 2	GlucoRx Instant	-
GlucoRx Nexus Voice	Visually impaired		-
Freestyle Libre 2 Plus	FreeStyle Libre 2 Plus should only be initiated under the advice of the specialist diabetes team	Freestyle Libre 2 Plus 1 sensor lasts 15 days 25 sensors per year per patient on NHS	Caresens meter and ketosens strips
Dexcom One Plus	Second line for patients who have experienced difficulties with Freestyle Libre 2 (e.g. adhesive issues)	Dexcom One Plus sensors 1 sensor lasts 10 days 36-37 sensors per year per patient on NHS	Caresens meter and ketosens strips
Jazz Wavesense	Gestational diabetes	WaveSense Jazz strips	

Urine testing for ketones
GlucoRx KetoRx® sticks

Hypodermic equipment

Injection devices
Reusable pens are available to prescribe in different colours to aid patients distinguish between their differing types of Insulin

Novopen 6 re-useable pen 3ml 1-60units for use with Novo Penfill cartridges
NovoPen Echo Plus re-usable pen 3ml 0.5-30 units for use with Novo penfill cartridges
Autopen 24®
HumaPen® Savvio re-useable pen 3ml 1- 60units for use with Humulin and Humalog cartridges
AllStar PRO® re-usable pen 1- 80units for use with Lantus and Apidra catrtridges
Junior STAR®

	Lancets Droplet and Caresens Lancets are compatible with most finger-pricking devices. Droplet lancets CareSens Lancets Unistik 3 (for visually impaired/dexterity problems) FastClix Lancets drum (only compatible with FastClix finger pricking device – provided with each Accuchek Instant meter) N.B Health professionals must only use single use devices: Sterilance Lite II – for use by health professionals only – do not prescribe – PECOS 143276 **Needles** BD Viva® (4mm) BD Autoshield Duo® – for use by health professionals only (do not prescribe- PECOS 189649) **Sharps Containers** Sharps bins should be provided for patients SharpSafe® container 1 litre SharpSafe® container 4 litre (Libre sensor patients only)
Section 3.2	**Hypoglycaemia** *Treatment for hypoglycaemia must not routinely be prescribed* Fruit juice/sugared drinks or soft jelly sweet *Choice of treatment if appropriate depends on the clinical situation and includes* Rapilose® Gel *(*glucose oral gel) Lift Glucose Juice Shot ® for renal patients (pay & report) Glucagon injection (GlucaGen® hypokit) – reserved for insulin-treated patients at high risk of hypoglycaemic attack who have a relative, carer or health professional who is able to reconstitute and administer correctly when required
Section 3.2a	**Chronic hypoglycaemia** refer to specialist services
Section 4	**Disorders of bone metabolism** *For further please refer to the following reference sources and local protocols* BEACON > DG RefHelp > Osteoporosis https://www.nhsdghandbook.co.uk/medical-handbook/osteoporosis SIGN 142 https://www.sign.ac.uk/media/1741/sign142.pdf **Fracture risk assessment** Management has shifted from diagnosing osteoporosis by bone density definition (lumbar spine or hip bone density 2.5 standard deviations or more below the young adult mean value for women, reported as T score <-2.5 by DEXA scan) to assessing and reducing fracture risk. A DEXA scan is recommended as part of the fracture risk assessment if already identified as “increased risk” – see Referral Criteria for DEXA on RefHelp and FRAX or Qfracture risk assessment calculators. If multiple vertebral collapses (2 or more) exclude myeloma or metastatic disease and commence treatment to reduce fracture risk regardless of bone density (DEXA not required however can be useful) **Safety considerations** Bisphosphonates are contraindicated where eGFR < 30ml/min for risedronate and ibandronic acid and eGFR < 35ml/min for alendronic acid MHRA warning regarding osteonecrosis of jaw with bisphosphonates https://www.gov.uk/drug-safety-update/bisphosphonates-osteonecrosis-of-the-jaw

	MHRA warning for neck of femur fractures *https://www.gov.uk/drug-safety-update/bisphosphonates-atypical-femoral-fractures* **Prevention and treatment of postmenopausal osteoporosis** Early menopause or under 60 years with no contraindications HRT see 6.8.1 **Calcium & Vitamin D Supplements** Dietary sources Accrete D3 film coated tablet (1 tablet twice daily) TheiCal-D3 chewable (1 tablet daily, dissolves on tongue for those with swallowing difficulties) Adcal D3 caplet (2 tablets twice daily) **Treatment of osteoporosis** Early menopause or under 60 years with no contraindications HRT see 6.8.1 Post menopausal osteoporosis Alendronic acid 70mg weekly Risedronate sodium 35mg weekly Ibandronic acid 150mg monthly + Calcium and Vitamin D3 supplement ***Specialist initiation only*** Zolendronic acid 5mg (IV infusion) Romosumab (sub cut injection) Denosumab 60mg/ml 6 monthly s/c injection *(see shared care protocol and monitoring advice on RefHelp>Osteoporosis>Denosumab shared care protocol)* Teriparatide (Movymia®) *daily sub cut injections – via Homecare* **Corticosteroid-induced osteoporosis (treatment and prevention)** Alendronic acid 70mg (once weekly) Risedronate sodium 35mg (once weekly) + Calcium and Vitamin D3 supplement **Male osteoporosis** *Specialist referral should be considered* Alendronic acid 70mg (once weekly) *please note licensed dose of alendronic acid in men is 10mg once daily, but it is common practice to use 70mg once weekly* + Calcium and Vitamin D3 supplement **Treatment of Vitamin D deficiency** See DG RefHelp>Osteoporosis> Vitamin D
Section 5	**Dopamine responsive conditions** **Treatment of hyperprolactinaemia:** Quinagolide *in light of recent MHRA advice this should be drug of choice unless not tolerated/effective* Cabergoline no longer first line therapy due to possibility of pulmonary fibrosis/cardiac valvolopathy Bromocriptine recommended for women planning a pregnancy

<table>
<tr><td>Section 6</td><td>Gonadotrophin responsive conditions – Specialist initiation only
Specialist use only
Nafarelin

Acromegaly somatostatin analogues
Octreotide – Olatuton preferred brand
Lanreotide</td></tr>
<tr><td>Section 6.1</td><td><u>Hereditary angioedema</u>
refer to specialist services</td></tr>
<tr><td>Section 7</td><td>Hypothalamic and anterior pituitary hormone related disorders
refer to specialist services</td></tr>
<tr><td>Section 7.1</td><td>Adrenocortical function testing
refer to specialist services</td></tr>
<tr><td>Section 7.2</td><td>Assessment of pituitary function
refer to specialist services</td></tr>
<tr><td>Section 7.3</td><td>Gonadotrophin replacement therapy
refer to specialist services</td></tr>
<tr><td>Section 7.4</td><td>Growth hormone disorders
refer to specialist services</td></tr>
<tr><td>Section 8</td><td>Sex hormone responsive conditions</td></tr>
<tr><td>Section 8.1</td><td>Female sex hormone responsive conditions

Prescribing notes
• For women requiring both oestrogen and progestogen aim to give as a single preparation where available to minimise patient error and encourage equal absorption of both components
• For women deemed low-risk of thromboembolism utilise oral tablet HRT
• Consider transdermal HRT for women with: GI disorder affecting oral absorption; previous or family history of VTE; BMI>30; migraine headache; current use of hepatic inducing enzyme medication; gallbladder disease
• Initiate prescribing using the lowest available dose, titrating no quicker than 3 monthly to the lowest effective dose, continuing for the shortest duration to manage symptoms.
• Consider switching from sequential combined HRT to continuous combined HRT in women over 50 years old after a period of 12-18 months on sequential combined HRT, however women younger than 50 years old may require to be on sequential HRT for 2-3 years to reach amenorrhoea; sequential combined HRT should not be used for longer than 5 year duration
• HRT-Guide-160516.pdf BMS flowchart

Oestrogen only HRT - for women who have had a hysterectomy; or receiving progestogen separately i.e. Mirena coil inserted within 5 years, or taking micronised progesterone, or medroxyprogesterone in a dose proportionate to oestrogen

HRT Dose : Menopause Matters (link to oestrogen dose prescribing)

<table>
<tr><th colspan="2"><u>ORAL TABLETS</u></th></tr>
<tr><td>LOW DOSE</td><td></td></tr>
<tr><td>Elleste Solo</td><td>Estradiol hemihydrate 1mg</td></tr>
<tr><td>Zumenon 1mg</td><td>Estradiol valerate 1mg</td></tr>
<tr><td>Progynova 1mg</td><td>Estradiol valerate 1mg</td></tr>
<tr><td>MEDIUM DOSE</td><td></td></tr>
<tr><td>Elleste solo</td><td>Estradiol hemihydrate 2mg</td></tr>
<tr><td>Zumenon 1mg</td><td>Estradiol valerate 2mg</td></tr>
<tr><td>Progynova 1mg</td><td>Estradiol valerate 2mg</td></tr>
</table>
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*note the Estradot patches are the smallest in size, are often the brand women report stick best, but are also most often associated with stock shortages

TRANSDERMAL GEL/SPRAY (please note all formulations contain ethanol)	
TRANSDERMAL PATCHES	
LOW DOSE	
Estraderm MX	Estradiol 25mcg
Evorel	Estradiol 25mcg
Estradot*	Estradiol 25mcg, 37.5mcg
MEDIUM DOSE	
Estraderm MX	Estradiol 50mcg
Evorel	Estradiol 50mcg
Estradot	Estradiol 50mcg
HIGH DOSE	
Estraderm MX	Estradiol 75mcg; 100mcg
Evorel	Estradiol 75mcg; 100mcg
Estradot	Estradiol 75mcg; 100mcg
Oestrogel	0.75mg/metered 1.25g pump
Lenzetto	1.53mg/metered spray
Sandrena 0.5mg	0.5mg/sachet
Sandrena 1mg	1mg/sachet

Sequential combined: Peri-menopausal women with a uterus, i.e. less than 1 year since last menses

ORAL TABLETS	
LOW DOSE	
Elleste Duet 1mg	Estradiol 1mg + norethisterone 1mg
Femoston 1/10mg	Estradiol 1mg + dydrogesterone 10mg
MEDIUM DOSE	
Elleste Duet 2mg	Estradiol 2mg + norethisterone 1mg
Femoston 2/10mg	Estradiol 2mg + dydrogesterone 10mg

TRANSDERMAL PATCH	
MEDIUM DOSE	
Evorel Sequi*	Estradiol 50mcg; Estradiol 50mcg + norethisterone

Combined patches are only available in medium dose strength. Local menopause service would suggest starting treatment using half of an Evorel Sequi patch twice weekly to achieve a low dose regimen. This is an unlicensed dose but supported by local and national specialists. The cut half of the patch should be kept in a refrigerator.

*note Evorel Sequi contains two different types of patches in the pack, with the regimen of two weeks of Evorel 50mcg (estradiol only) patches, to be followed by two weeks of Evorel Sequi (estradiol and norethisterone) patches. It is important to appropriately counsel patients on the safe and effective use of this product when prescribing.

Continuous Combined HRT: for post-menopausal women, with a uterus, who have not experienced menses for 1 year+ or perimenopausal women who are amenorhoeic due to their POP/implant

ORAL TABLET	
ULTRA-LOW DOSE	
Femoston-conti 0.5mg/2.5mg	Estradiol 0.5mg + dydrogesterone 2.5mg
LOW DOSE	
Kliovance	Estradiol 1mg + norethisterone 0.5mg
Femoston-conti 1mg+5mg	Estradiol 1mg + dydrogesterone 5mg
Bijuve	Estradiol 1mg + progesterone 100mg
MEDIUM DOSE	
Kliofem	Estradiol 2mg + norethisterone 1mg)
Elleste Duet Conti	Estradiol 2mg + norethisterone 1mg

TRANSDERMAL PATCH	
ULTRA-LOW DOSE	
Femoston-conti 0.5mg/2.5mg	Estradiol 0.5mg + dydrogesterone 2.5mg

SEPARATE OESTROGEN AND PROGESTOGEN REGIMENS (not a combination tablet or patch which contains both hormonal components)

When oestrogen and progestogen are administered separately, in order to protect against endometrial hyperplasia the dose of progestogen should be proportional to the required oestrogen dose, i.e. high dose oestrogen-containing regimens should have high dose progestogen component.

The levonorgestrel 52mg IUS system, i.e. Mirena, can be used for all licensed doses of oestrogen and current practice would be to use this for up to 5 years for endometrial protection.

14-BMS-TfC-Progestogens-and-endometrial-protection-APR2023-A.pdf

ORAL PROGESTOGEN

Micronised progestogen should be taken at night due to side effect of sleepiness. Absorption is improved by taking with some food.

Before increasing dose of oestrogen, first worth considering the following:

- Expectations—are the symptoms likely to be hormone related, or are life stresses more relevant
- Address any diet and lifestyle factors which may be contributing to menopausal symptoms if appropriate, such as smoking, alcohol, caffeine, high carbohydrate, sugary diet, lack of exercise.
- Addition of Cognitive Behaviour Therapy may help for flushes, anxiety, low mood, irritability, sleep disturbance

https://www.womens-health-concern.org/wp-content/uploads/2023/02/02-WHC-FACTSHEET-CBT-WOMEN-FEB-2023-A.pdf

- If brain fog is a prominent symptom, the following leaflet may be helpful, explaining that brain fog is common, may or may not respond to HRT and does resolve

https://www.imsociety.org/wp-content/uploads/2022/09/ENGLISH-WMD-Leaflet.pdf

- If using patches: are they adhering, any skin irritation, consider site application—buttocks provide best absorption

- If using gel ensure applying to thighs and letting soak in for 10-15minutes prior to dressing

ULTRA-LOW TO MEDIUM DOSE SEQUENTIAL HRT	
Up to 50mcg dose patch/ 2 pumps Oestrogel /2 sprays Lenzetto	
Micronised progesterone 100mcg	200mcg in the evening with food on days 15-28
Medroxyprogesterone tablets	10mg daily on days 15-28
HIGH DOSE SEQUENTIAL HRT	
Up to 75mcg patch/3 pumps Oestrogel /3 sprays Lenzetto	Discuss with Menopause team if ultra-high dose oestrogen being considered
Micronised progesterone 100mcg	300mcg in the evening with food on days 15-28
Medroxyprogesterone tablets	10mg daily on days 15-28
ULTRA-LOW TO MEDIUM DOSE CONTINUOUS COMBINED HRT	
Up to 50mcg dose patch and 2 pumps Oestrogel	
Micronised progesterone 100mcg capsules	100mcg in the evening with food
Medroxyprogesterone acetate	2.5mg daily
HIGH DOSE CONTINUOUS COMBINED HRT	
Up to 75mcg patch and 3 pumps Oestrogel	Discuss with Menopause team if ultra-high dose oestrogen being considered
Micronised progesterone 100mcg capsules	200mcg in the evening with food
Medroxyprogesterone acetate	5mg daily

Dysmenorrhoea
Ibuprofen
Paracetamol

Irregular uterine bleeding – contraception not required
Northisterone
Medroxyprogesterone acetate

Irregular uterine bleeing – contraception required
See section on combined oral contraception

Endometriosis
See NICE guideline Overview | Endometriosis: diagnosis and management | Guidance | NICE
See section on combined oral contraception or
Northisterone
Medroxyprogesterone aceteate
Triptorelin acetate injection- Specialist advice only
Ryeqo® (relugolix, estradiol.norethisterone tablets) – Specialist advice only

Uterine Fibroids – treatment of moderate to severe uterine fibroids is by Specialist advice only
Ulipristal acetate (Esmya®) – See MHRA Drug Safety update Ulipristal acetate 5mg (Esmya): further restrictions due to risk of serious liver injury - GOV.UK
Triptorelin acetate injection- Specialist advice only
Ryeqo® (relugolix, estradiol.norethisterone tablets) – Specialist advice only

<table>
<tr><td>Section 8.2</td><td>
<u>Male sex hormone responsive conditions</u>
Testosterone for hypogonadism due to testosterone deficiency in adult men
Ensure FBC and PSA checked annually once stable

<table>
<tr><th>Brand</th><th>Dose</th><th>Strength</th></tr>
<tr><td>TESTAVAN®
85.5g pump</td><td>Apply 23mg (1 pump) daily.
Increased in steps of 23mg to a max of 69mg (3 pumps) daily</td><td>20mg testosterone in 1ml gel

1 pump actuation = 1.15g (1.25ml) gel containing 23mg testosterone</td></tr>
<tr><td>TESTOGEL ® 88g pump</td><td>Apply 40.5mg (2 pumps) daily.
Increased in steps of 20.25mg to a max of 81mg (4 pumps daily)</td><td>16.2mg testosterone in 1g gel

1 pump actuation = 1.25g gel containing 20.25mg testosterone</td></tr>
<tr><td>TESTOGEL®
30 x 5g sachets</td><td>Apply 50mg (5ml) daily.
Increased in steps of 25mg to a max of 100mg (10ml) daily</td><td>50mg testosterone in 5ml gel</td></tr>
<tr><td>TROSTRAN®
60g gel</td><td>Apply 60mg (3g) daily. Increase to a max of 80mg (4g) daily</td><td>20mg testosterone in 1g gel</td></tr>
<tr><td>NEBIDO
1 X 4ml vial
Specialist initiation only</td><td>1g (4ml) by very slow deep IM injection into gluteal muscle every 10-14 weeks (first injection interval can be 6 weeks)</td><td>250mg testosterone per 1ml solution</td></tr>
</table>

Anti-androgens
Finasteride
</td></tr>
<tr><td>Section 8.2a</td><td>Male sex hormone antagonism
Refer to specialist services</td></tr>
<tr><td>Section 9</td><td>Thyroid disorders</td></tr>
<tr><td>Section 9.1</td><td>
<u>Hyperthyrodism</u>

Antithyroid drugs
To be initiated on specialist advice
Carbimazole
Propylthiouracil – Patients should be counselled re risk of hepatitis (see SPC at www.medicines.org.uk)

Beta-blockers
Propranolol
</td></tr>
<tr><td>Section 9.2</td><td>
<u>Hypothyrodism</u>

Levothyroxine
MHRA Dryg Safety Update 2021: levothyroxine new prescribing advice for patients whoexperience symptoms on switching between different levothyroxine products

Liothyronine Specialist initiation

Hypoparathyroidism
Alfacalcidol Calvive® 1000
</td></tr>
</table>

	Hyperparathyroidism Cinacalcet

Back to Contents page

BNF Chapter 7 Genito-urinary System	
1. **Bladder and urinary disorders** 2. **Bladder instillations and urological surgery** 3. **Contraception** 4. **Erectile and ejaculatory conditions** 5. **Obstetrics** 6. **Vaginal and vulval conditions**	
Section 1	**Bladder and urinary disorders**
Section 1.1	Oxybutynin IR Solifenacin Mirabegron – Note: To be considered where 2 separate trials of anti-muscarinics have not been effective or where first line options are contraindicated. This may be considered a first line option in patients with a high anti-cholinergic burden would be detrimental. In line with Scottish Polypharmacy Guidance 2015. Stress Urinary Incontinence in Women Pelvic floor muscle exercises See national guidance - Nice guidance - Men Nice guidance women Management | Incontinence - urinary, in women | CKS | NICE
Section 1.2	**Urinary retention** **Alpha-andrenoceptor blockers** Tamsulosin MR caps Alfuzosin Doxazosin **5α-reductase inhibitors** Finasteride Dutasteride
Section 1.3	**Urolithiasis** Consider alpha-adrenoceptor blockers in patients with distal ureteric stones less than 10mm in diameter
Section 1.4	**Urological pain** **Alkalinisation of urine** Potassium citrate
Section 2	**Bladder instillations and urological surgery** Bladder infection, dissolution of blood clots and maintenance of indwelling urinary catheters Sodium chloride 0.9%
Section 3	**Contraception** **Refer to sexual health guidelines at –** West of Scotland sexual health guidelines
Section 3.1	**Contraception** **Combined hormonal contraceptives - oral** ***1st generation*** Brevinor®

	2nd generation – ethinylestradiol + levonorgestrel **Levest® 150/30** Rigevidon® ***Triphasic*** TriRegol® ***3rd generation – ethinylestradiol + desogestrel*** Bimizza® 150/20 Cimizt 30/150 ***3rd Generation – ethinylestradiol + gestodene*** Millinette 30/75 and 20/75 ***3rd Generation – ethinylestradiol + norgestimate*** Lizinna® 250/35 (replaces Cilique® 250/35) 4th Generation Yasella *Prescribing note* Yasmin and Qlaira are not approved for use in NHS Scotland by the SMC **Combined hormonal contraceptives – transdermal** Evra® patches (ethinylestradiol + norelgestromin) *Prescribing note* SMC had advised that Evra® patches should be restricted for use in women who have difficulties adhering to combined oral contraceptives **Combined hormonal contraceptives – vaginal** Nuvaring (ethinylestradiol + etonogestrel)
Section 3.2	**Contraception devices** **Inter-uterine devices** TT 380® Slimline 10 year IUD Short uterus – Mini TT 380® Slimline (5 year) Narrow os – Nova-T® 380 (5 year) Narrow os and short uterus CU-Safe® T 300 (5 year) **Diaphragms/caps -** *Seek advice from sexual health on the most cost effective product at the time of prescribing*
Section 3.3	**Contraception, emergency** Copper IUD should be offered first line **Hormonal Emergency Contraception** Ulipristal acetate 30mg effective up to 120hrs *Levonorgestrel 1.5mg effective up to 96hrs* **See FSRH guidance (December 2017 – updated 2023)** for clarification on when Ulipristal or levonorgestrel is most appropriate, for changes in relation to weight/ unprotected sex during the 5 days prior to the estimated day of ovulation/ progestogen taken in the preceding 7 days or if progestogen to be quick started etc. Faculty of Sexual and Reproductive Healthcare guidance

Section 3.4	**Contraception, oral progestogen – only** Desogestrel (12 hour window)
Section 3.5	**LARC parenteral progestogen - only** Medroxyprogesterone acetate 150mg/1ml (Depo-Provera®) Medroxyprogesterone acetate 104mg/0.65ml (Sayana Press®) for self-administration. **LARC - Contraceptive implants** Etonogestrel (Nexplanon®) **LARC - Hormone releasing intra-uterine systems** Levosert® (LNG 52mg) Benilixa® (LNG 52mg) Mirena® (LNG 52mg) Kyleena ® (LNG 19.5mg) Jaydess® (LNG 13.5mg) *Prescribing notes:* The FSRH supports extended use of any 52mg LNG-IUD for up to eight years for contraception if the user is under 45 years old at the time of insertion. Note that the use of Benilexa® and Levosert® for eight years is off-label. For Mirena® the licensed duration of use for endometrial protection as part of HRT is 4 years, however FSRH supports use of any 52mg LNG IUD for endometrial protection as part of HRT for 5 years. Levosert® and Benilexa® are not licensed for endometrial protection as part of HRT. Fsrh-ceu-statement-extended-use-of-all-52mg-lng-iuds-for-up-to-eight-years-for-contraception.pdf
Section 4	**Erectile and ejaculatory conditions**
Section 4.1	**Erectile dysfunction** **Prescription must be endorsed 'SLS' by the prescriber. Only allowed on the NHS as per criteria listed in BNF chapter 7.4.1** Sildenafil tablets (Guidance states that no more than 8 per 4 week period should be prescribed) Alprostadil injection (Caverject Dual Chamber®) Alprostadil urethral cream (Vitaros®)
Section 4.2	**Premature ejaculation** Specialist treatment
Section 5.1	**Polycystic ovary syndrome** Metfromin – unlicensed indication
Section 7	**Obstetrics** **Specialist initiation only**
Section 7.1	**Induction of labour** Dinoprostone oxytocin
Section 7.2	**Post-partum haemorrhage** Oxytocin Tranexamic acid Ergotamine Carboprost

<table>
<tr><td></td><td>Ergotamine/oxytocin (syntometrine)</td></tr>
<tr><td>Section 7.3</td><td>Pre-term labour
Atosiban</td></tr>
<tr><td>Section 7.4</td><td>Termination of pregnancy/Hospital management of non-viable pregnancy
Mifepristone
Misoprostol

Hospital management - Ectopic pregnancy
Methotrexate

Hospital management- Suppression of Lactation
Cabergoline

Hospital management - Uterine hyperstimulation
Terbutaline injection</td></tr>
<tr><td>Section 8.1</td><td>Vaginal and vulval conditions

Lichen sclerosus
Clobetasol propionate 0.05% ointment -

Vulval moisturizers (Can be used as a wash/ soap substitute)
Epimax ointment
Hydromol ointment
Doublebase gel or equivalent emollient

Vaginal Atrophy

<table>
<tr><th>Product</th><th>Estrogen content</th></tr>
<tr><td>Estriol 0.1% cream</td><td>Estriol 500micrograms/applicator</td></tr>
<tr><td>Estriol 0.01%</td><td>Estriol 500micrograms/applicator</td></tr>
<tr><td>Estradiol 10micrograms pessary (prescribe generically)</td><td>Estradiol 10micrograms/pessary</td></tr>
<tr><td>Estring (change every 3 months)</td><td>Estradiol 7.5micrograms/day</td></tr>
</table>

Symptom control
Hyalofemme®
Sylk® VM
YES® VM

Dysmenorrhoea
Ibuprofen
Paracetamol

Oligomenorrhoea
See section on combined oral contraception
Medroxyprogesterone acetate</td></tr>
</table>

Back to Contents page

BNF Chapter 8 – Malignant disease
For solid tumours please refer to SCAN: OOQS - The Oncology Online Quality System For haematology please refer to WOSCAN: https://scottish.sharepoint.com/sites/WoSCANIntranet

Back to Contents page

BNF Chapter 9 – Blood and Nutrition	
Blood and blood-forming organs	
Section 1	**Anaemias**
Section 1.1	**Atypical haemolytic uraemic syndrome &6Paroxysmal nocturnal haemoglobinuria** Ravulizumab – as per local guidance – specialist use only
Section 1.2	**Iron deficiency anaemia** **Oral treatment** Ferrous sulfate 200mg tablets (once daily dosing) *Prescribing notes;* The British Society of Gastroenterologists and NICE recommend that the initial treatment of iron deficiency anaemia should be with one tablet per day of ferrous sulphate, fumarate or gluconate. If not tolerated or if Hb does not rise after 28 days, a reduced dose of one tablet every other day, alternative oral preparations or parenteral iron should be considered. Patients should be monitored in the first 4 weeks for an Hb response to oral iron, and treatment should be continued for a period of around 3 months after normalisation of the Hb level, to ensure adequate repletion of the marrow iron stores. Modified release preparations release iron in the more distal small bowel beyond the areas of most active assimilation—they do not enhance iron absorption or reduce side effects, and their use is not recommended." Liquid iron can be used in adults where oral preparations are not appropriate or in paediatrics. Iron-Deficiency-Anaemia-in-Adults.pdf **Parenteral treatment*** Iron Dextran (Cosmofer®) Iron isomaltoside 1000 (Monofer®) – IV infusion only as per SMC Please refer to https://www.nhsdghandbook.co.uk/medical-handbook/parenteral-iron-in-adults-18-years/?handbook=medical MHRA Drug safety update Dec 2014: Intravenous iron and serious hypersensitivity reactions strengthened recommendations MHRA Drug Safety UpdateDec 2014: Intravenous iron and serious hypersensitivity reactions
Section 1.3	**Megaloblastic anaemia** Folic acid 5mg tablets *Prescribing Note:* *Treatment normally required for 4 months with folic acid. Folic acid must not be used alone in undiagnosed megaloblastic anaemia due to risk of B12 deficiency and peripheral neuropathy)* Hydroxocobalamin injection for the treatment of vitamin B12 deficiency (see CKS) **For people with neurological involvement s**eek urgent specialist advice from a haematologist who will advise on treatment frequency. **For people with no neurological involvement** ○ Initially administer hydroxocobalamin 1 mg intramuscularly three times a week for 2 weeks. ○ The maintenance dose depends on whether the deficiency is diet related or not. For people with B12 deficiency that is: ▪ *Not* thought to be diet related — administer hydroxocobalamin 1 mg intramuscularly every 2–3 months for life. ▪ Thought to be diet related — consider oral cyanocobalamin tablets *prescribing guidance under review* ▪ In vegans, treatment may need to be life-long, whereas in other people with dietary deficiency replacement treatment can be stopped once the vitamin

	B12 levels have been corrected and the diet has improved. ○ Give dietary advice about foods that are a good source of vitamin B12 — good sources of vitamin B12 include: ▪ Eggs. ▪ Foods which have been fortified with vitamin B12 (for example some soy products, and some breakfast cereals and breads) are good alternative sources to meat, eggs, and dairy products. ▪ Meat. ▪ Milk and other dairy products ▪ Salmon and cod
Nutrition and Metabolic Disorders	
Section 1	**<u>Fluid and Electrolyte imbalances</u>** **Oral Bicarbonate – chronic acidotic states** Sodium bicarbonate capsules **Hypokalaemia** Sando-K® effervescent tablets Kay-Cee-L® syrup **Hyponatraemia** Sodium chloride M/R tablets **Hypocalcaemia** Adcal® chewable tablet Calvive® 1000 effervescent tablets **Hypomagnesaemia** Magnaspartate® sachets Magnesium glycerphosphate chewable tablets (Neomag®) **Hypophosphataemia** Phosphate Sandoz® effervescent tablets **Hyperkalaemia (mild to moderate)** Calcium polystyrene sulphonate (Calcium resonium®) **Oral Rehydration Salts** Dioralyte® sachets
Section 1.2	**Low blood volume** Albumin/Gelaspan
Section 5.1	**Coeliac disease** See gluten-free formulary GFF-update-2022-1.pdf
Section 6	**Vitamin deficiency** **<u>Vitamin B group</u>** B6 – Pyridoxine tablets B1- Thiamine 50mg tablets Pabrinex® injection/infusion Vitamin B Co strong – in re-feeding syndrome for 10 days Overview | Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition | Guidance | NICE *Prescribing notes:* vitamin B complex is not recommended for prescribing MHRA Drug Safety Update Dec 2014: Pabrinex Allergic reactions **<u>Vitamin C</u>** – non formulary. Patients requiring vitamin C should be encouraged to eat vitamin c rich foods due to the high cost of this product

	Vitamin D Alfacalcidol (renal patients) Stexerol-D3® (2x 25,000iu) for 6 weeks then maintenance Value Pack Vitamin D3 1,000 IU daily for treatment of deficiency If swallowing difficulties: InVita D3 oral drops 25,000IU Ergocalciferol 300,000 IU/ml intramuscular injection – to be supplied by clinic. If necessary can also be obtained as single ampoule from DGRI pharmacy. *Prescribing notes:* Invita D3® can be mixed with food or luke warm water. **Vitamin K** Malabsorption syndromes (water-soluble preparation required): Menadiol sodium phosphate Fat soluble formula (not malabsorption): Phytomenadione **Multivitamins** Abidec ®drops
Section 6.1	**Neural tube defects (prevention in pregnancy)** Folic acid 400micrograms daily should be recommended for all women attempting to conceive and until 12th week of pregnancy. Advise women who are obese (BMI of 30 kg/m^2 or more) to take folic acid 5 mg daily starting at least one month before conception and continuing during the first trimester Women at high risk (those with epilepsy, or those with previously affected pregnancy) should be advised to take 5mg folic acid.
	Nutrition Oral Nutritional Supplements (ONS) should not be used as first line treatment for malnutrition. Food fortification via dietary measures should be encouraged first. ONS should ideally be prescribed on the recommendation of a Registered Dietitian and should always have an ACBS indication. **Standard ACBS indications:** • Disease-related malnutrition. • Short bowel syndrome. • Intractable malabsorption. • Pre-operative preparation of patients who are malnourished. • Proven inflammatory bowel disease (IBD). • Following total gastrectomy. • Bowel fistula. **Other products may be prescribed as advised by Dietitian** *Oral Nutritional Supplements (for use in adults)* ***First Line Product:*** Complan Shake (57g sachet reconstitute with 200ml whole milk, 1.6kcal/ml) **Second Line Products:** **Milk based**: Fortisip® Compact (low volume,125ml bottle, 2.4kcal/ml) Fortisip® Bottle (200ml bottle, 1.5kcal/ml) Ensure Plus® Milkshake Style (220ml bottle, 1.5kcal/ml) ***Juice based:*** Fortijuce® (200ml bottle) Ensure Plus® Juce (220ml bottle, 1.5kcal/ml)

	Yogurt Style: Fortisip® Yogurt Style (200ml bottle, 1.5kcal/ml)) Ensure Plus® Yogurt Style (220ml bottle, 1.5kcal/ml) **Thickeners** Nutilis clear®, *(not suitable for children <1yr except for failure to thrive)* Carobel Instant® *For more information on managing malnutrition, including patient and carer information leaflets, please see: http://malnutritionpathway.co.uk or visit the Nutrition and Dietetic Patient and Carer Information Leaflets page on Beacon: http://hippo.citrix.dghealth.scot.nhs.uk/sorce/beacon/singlepageview.aspx?pii=589&row=769&SPVPrimaryMenu=5&SPVReferrer=Patient_and_Carer_Information_Leaflets*

Back to Contents page

BNF Chapter 10 – Musculoskeletal System

Section 1

Arthritis

Please refer to the following protocols and guidance:

- NICE guideline NG100: Rheumatoid arthritis in adults: management
- NICE guideline NG65: Spondyloarthritis in over 16s: diagnosis and management
- For DMARD monitoring protocols please refer to:
  Beacon>DGRefHelp>Rheumatology>DMARD monitoring protocols

Safety considerations

- MHRA :MHRA: Methotrexate once-weekly for autoimmune diseases: new measures to reduce risk of fatal overdose due to inadvertent daily instead of weekly dosing
- MHRA: Mycophenolate mofetil, mycophenolic acid: updated contraception advice for male patients Feb 2018
- MHRA: Mycophenolate mofetil, mycophenolic acid: new pregnancy-prevention advice for women and men Dec 2015
- MHRA DSU: Mycophenolate mofetil: pure red cell aplasia, July 2009
- MHRA DSU: Mycophenolate mofetil (CellCept) and mycophenolic acid: risk of hypogammaglobulinaemia and risk of bronchiectasis, January 2015
- MHRA DSU: Baricitinib (Olumiant▼): increased risk of diverticulitis, particularly in patients with risk factors
- MHRA DSU tofacitinib-new measures to minimise risk of major adverse cardiovascular events and malignancies October 2021
-

Rheumatoid arthritis – moderate to severe disease
Immunosuppressants - *Specialist Initiation Only**

DMARDs (all initiated in consultation with a specialist)
Methotrexate (2.5mg tablets,once dose is stabilised, specialists may change to once weekly subcutaneous injection pre-filled pens (Metoject®))
Patient should stay on same brand they are used to. Prescribe MTX injection by brand.
Hydroxychloroquine tablets Leflunimode tablets
Sulphsalazine EC tablets Azathioprine tablets
Ciclosporin capsules – patients should be maintained on the same brand
Cyclophosphamide
Please note methotrexate should only be prescribed as multiples of the 2.5mg strength tablet once weekly

TNF-alpha inhibitors
Adalimumab SC Injection – *preferred biosimilar Amgevita®*
Infliximab IV/SC Injection - *preferred biosimilar Remsima®*
Etanercept SC Injection– *preferred biosimilar Benepali®*
Certolizumab SC Injection
Golimumab SC Injection

CD-20 blocker
Rituximab Infusion – *preferred biosimilar Ruxience®*

IL-6 inhibitors
Sarilumab SC Injection
Tocilizumab SC Injection - *preferred biosimilar Tyenne®*

CTLA-4 Blocker
Abatacept SC Injection

JAK inhibitors
Filgotinib tablets
Upadacitinib tablets
Baricitinib tablets
Tofacitinib tablets

	Psoriatic Arthritis **Immunosuppressants - *Specialist Initiation Only*** TNF-alpha inhibitors Adalimumab SC Injection – *preferred biosimilar Amgevita®* Infliximab IV/SC Injection - *preferred biosimilar Remsima®* Etanercept SC Injection– *preferred biosimilar Benepali®* Certolizumab SC Injection Golimumab SC Injection IL-17 Inhibitors Secukinumab SC Injection Bimekizumab SC Injection Ixekizumab SC Injection IL-12/23 Ustekinumab SC Injection - *preferred biosimilar Uzpruvo®* Guselkumab SC Injection JAK inhibitors Upadacitinib tablets Tofacitinib tablets PDE-4 inhibitor Apremilast tablets **Ankylosing Spondylitis** Naproxen Ibuprofen Paracetamol (+/- codeine) where NSAIDs are not suitable/tolerated Immunosuppressants - *Specialist Initiation Only* TNF-alpha inhibitors Adalimumab SC Injection – *preferred biosimilar Amgevita®* Infliximab IV/SC Injection - *preferred biosimilar Remsima®* Etanercept SC Injection– *preferred biosimilar Benepali®* Certolizumab SC Injection Golimumab SC Injection IL-17 Inhibitors Secukinumab SC Injection Bimekizumab SC Injection JAK inhibitors Upadacitinib tablets Tofacitinib tablets **Still's disease** Anakinra injection - *as per SMC 2104* **Giant Cell Arteritis (GCA)** (adults) Tocilizumab prefilled syringe/pen – *as per SMC 2014* **ANCA – Associated Vasculitis –** *under specialist management* Induction: Glucocorticoids (prednisolone tablets, IV methylprednisolone), methotrexate, cyclophosphamide, Rituximab infusion – preferred biosimilar Ruxience® Maintenance: prednisolone tablets, rituxamab infusion – preferred biosimilar Ruxience®, azathioprine, mycophenolate mofetil, methotrexate
Section 2	**Hyperuricaemia and Gout** • See Beacon>DGRefHelp>Rheumatology>Gout • British society for Rheumatology guidelines for the management of gout 2017 • NICE CKS guidelines https://cks.nice.org.uk/topics/gout/

	Acute attacks Naproxen Ibuprofen Colchicine 500mcg tablets BD – QDS • Total dose per course should not exceed 6mg, do not repeat course within 3 days • Avoid Colchicine in those receiving (or recently prescribed if renal impairment) strong P-glycoprotein or CYP3A4 inhibitors eg clarithromycin. See SPC for colchicine • MHRA Colchicine: extremely toxic in overdose Prednisolone tablets 30mg ONCE daily for 5 days – *if NSAID or colchicine contraindicated or cannot be tolerated* **Longterm prophylaxis of gout** Allopurinol tablets Febuxostat tablets
Section 3	**Neuromuscular disorders** See BNF for further information
Section 3.1	**Muscular dystrophy** See BNF for further information
Section 3.2	**Myasthenia gravis and Lambert-Eaton myasthenic syndrome** Pyridostigmine tablets Neostigmine tablets
Section 3.3	**Myotonic disorders -** See BNF for further information
Section 3.4	**Spasticity** Baclofen tablets Diazepam tablets
Section 4	**Pain and inflammation in musculoskeletal disorders** **Non-steroidal anti-inflammatory drugs** Naproxen Ibuprofen **Safety considerations** • MHRA: Non-steroidal anti-inflammatory drugs: reminder on renal failure and impairment, May 2009 • MHRA: Non-steroidal anti-inflammatory drugs: cardiovascular risk, October 2012 • MHRA: NSAIDs and coxibs: balancing of cardiovascular and gastrointestinal risks, December 2007 * • MHRA: Ketoprofen and ketorolac: gastrointestinal risk, December 2014 change to hyperlink
Section 5	**Soft tissue and joint disorders** **Systemic corticosteroids oral** Prednisolone tablets *if prescribing oral steroids please refer to the HIGH DOSE Steroid Pre-treatment checklist in the clinical handbook: https://www.nhsdghandbook.co.uk/medical-handbook/high-dose-steroid-pre-treatment-checklist/?handbook* **Local corticosteroid injections** Methylprednisolone acetate (Depo – Medrone) Triamcinolone acetonide (Kenalog)
Section 5.1	**Soft tissue disorders** **Rubefacients** Ibuprofen 5%

Back to Contents page

BNF Chapter 11 Eye WHERE POSSIBLE GENERIC DROPS ARE ENCOURAGED AS FIRST LINE	
Section 1	**Allergic and Inflammatory Eye Conditions**
Section 1.1	**Allergic Conjuctivitis** Sodium Cromoglicate 2% Eye Drops – prescribe as Opticrom® in primary care 10ml (most cost effective size)
Section 1.2	**Inflammatory Eye Conditions** *The severity of the inflammation determines the choice of steroid. Topical steroids should not be used for undiagnosed red eye. If red eye is due to herpes simplex, corticosteroids will aggravate this condition possibly leading to loss of vision or even loss of the eye.* Prednisolone acetate 1% Eye Drops (most potent) Dexamethasone 0.1% Eye Drops Betamethasone 0.1% Eye/Ear/Nose Drops – prescribe as Vistamethasone® brand in primary care Prednisolone sodium phosphate 0.5% eye drops Fluorometholone eye drops* (least potent) Loteprednol 0.5% eye drops – specialist initiation only * Steroid eye drops can raise intra-ocular pressure (IOP) and therefore precipitate glaucoma in patients pre-disposed to chronic simple glaucoma. Evidence suggests that fluorometholone is less likely to raise IOP though this may be due to reduced penetration of the cornea. **Corticosteroid Combinations with Anti-Infectives** Dexamethasone (Maxitrol®) Eye Drops Betamethasone (Betnesol-N®) 0.1% Eye/Ear/Nose Drops
Section 1.2a	**Antimuscarinics** Cyclopentolate 0.5% and 1% Eye Drops (5ml) or Minims Atropine 1% PF *ensure Minims is prescribed*
Section 2	**Dry Eye Conditions** **Mild dry eye** Hypromellose 0.3% Eye Drops Carmellose VIZcellose® 0.5% /1% p/f eye drops *Stable for 3 months after opening and replaces Celluvisc®* Paraffins Xailin Night® Gel pf **Moderate dry eye** Sodium Hyaluronate Blink Intensive Tears (0.2%) pf Eyeaze® pf (in place of Hylotears®/Hyloforte®/Xailin® HA in primary care) Optive fusion® **Meibiamian Gland Deficiency** *Specialist initiation only* Systane Balance® **Immunosuppressant – severe dry eye** *Specialist initiation only* Ciclosporin 0.1% eye drops (Ikervis®)
Section 3	**Eye Infections**
Section 3.1	**Bacterial Eye Infection** *Prescribing Notes**:*** *Most cases of acute bacterial conjunctivitis are self-limiting. Treatment should be given if the condition has not resolved spontaneously after 5 days.*

	Antibacterials Chloramphenicol 1% Eye Ointment *Available via Pharmacy First* Chloramphenicol 0.5% Eye Drops *Available via Pharmacy First* Propamidine 0.1% Eye Drops (Brolene®) Antibacterials - Aminoglycosides Gentamicin 0.3% Eye/Ear Drops Antibacterials - Cephalosporins, Second Generation Cefuroxime topical drops Antibacterials - Macrolides Azithromycin 15mg/g Eye Drops pf Antibacterials - Quinolones Ciprofloxacin 0.3% Eye Drops Ofloxacin 0.3% eye drops Antiprotozoals Seek specialist advice
Section 3.2	**Viral Eye Infection** Ganciclovir 0.15% Eye Gel
Section 4	**Eye Procedures** Antimuscarinics Minims Tropicamide 1% Eye Drops Antiseptics and Disinfectants – Iodine Products Minims Povidone Iodine 5% Diagnostic Agents – Dyes Minims Fluorescein 1% Minims Fluorescein 2% Miotics – Parasympathomimetics Acetylcholine 20mg Powder & Solvent for Intraocular Irrigation – Miochol E Sympathomimetics – Vasoconstrictor Minims Phenylepherine 2.5% Minims Phenylepherine 10%
Section 4.1	**Post-operative pain and inflammation** Anaesthetics – Local Minims Tetracaine 1% Minims Fluorescein with Lidocaine Minims Proxymetacaine 0.5% Anaesthetics – Non Steroidal Anti-Inflammatory Drugs Ketorolac 0.5% Eye Drops Nepafanac 1% eye drops – as per SMC advice – for the reduction in risk of post operative macular oedema associated with cataract surgery in diabetic patients.
Section 5	**Glaucoma and Ocular Hypertension** Beta-adrenoceptor blockers Timolol 0.25% Eye Drops Timolol 0.5% Eye Drops

	Carbonic Anhydrase Inhibitors Acetazolamide 250mg Tablets Acetazolamide 250 MR Capsules Acetazolamide 500mg powder for solution for injection vials Dorzolamide 20mg/ml eye drops Brinzolamide 10mg/ml eye drops **Combination products** Dorzolamide/Timolol Brinzolamide/timolol (Azarga®) Azarga® allows patient to administer fewer drops compared to separate administrations Miotics-> Parasympathomimetics Pilocarpine 1% or 2% Prostaglandin analogues and Prostamides Travoprost 40mcg/ml eye drops Latanoprost 50micrograms/ml eye drops Combination products Latanoprost 50mcg/ml with Timolol 5mg/ml eye drops Sympathomimetics - Alpha2-adrenoceptor agonists Brimonidine 0.2% eye drops Apraclonidine 5% eye drops Brimonidine should not be used by patient on tricyclic antidepressants or MAOIs, on in those under 5 years of age. Combination products Brimonidine 2mg/ml with Timolol 5mg/ml Preservative free drops Formulations with preservative are significantly cheaper than preservative-free preparations. Latanoprost minims (Monopost®) SMC restricted to proven sensitivity to BAK preservative) Latanoprost/timolol (Fixapost®) UD SMC restricted to proven sensitivity to preservative Eylamdo® PF (dorzolamdie/timolol) multidose bottle can be considered in those requiring this combination who have a proven sensitivity to BAK. Multi dose bottle are less expensive than single dose vials. Eydelto® PF (dorzolamide) multidose bottle can be considered in those with a proven sensitivity to BAK. Multidose bottle are more cost effective than single dose vials.
Section 6	**Retinal disorders**
Section 6.1	**Macular degeneration** Aflibercept (Eylea®) Ranibizumab (Lucentis®)
Section 6.2	**Macular Oedema** Aflibercept(Eylea) Ranibizumab (Lucentis®) Dexamethasone (Ozurdex®) as per SMC Fluocinolone (Iluvien®) – IPTR as per local protocol

Back to Contents page

BNF Chapter 12 Ear, nose and oropharynx	
Section 1	**Otitis externa** https://cks.nice.org.uk/topics/otitis-externa/ For mild case: *Acetic acid 2% (Earcalm) can be purchased over the counter* If red and swollen with minimal discharge: Lower potency steroid: Prednisolone sodium phosphate 0.5% drops Higher potency steroid: Betamethasone sodium phosphate 0.1% drops If discharge/debris prevents product application, consider cleaning the ear canal first. Combined steroid + anti-infective product: Betnesol N Otomize **For fungal infections:** Clotrimazole 1% solution Investigations are rarely helpful but consider an ear swab if treatment fails or otitis externa occurs frequently
Section 2	**Removal of ear wax** Olive oil drops Sodium bicarbonate ear drops
Nose Section 2	**Nasal Staphylocaccal infection** Naspetin cream (contains peanut oil) Fucidin Cream For MRSA decolonisation regimes see beacon Nasal decolonisation of MRSA: Mupirocin nasal (Bactroban nasal)
Section 3	**Nasal Inflammation** Beclomethasone dipropionate 50micrograms per 1 dose nasal spray Mometasone fuorate 50micrograms per 1 dose nasal spray
Oropharynx Section 1	https://bnf.nice.org.uk/treatment-summary/treatment-of-dry-mouth.html Xerotin Oral spray Biotene oralbalance Gel Salivix Pastilles
Section 2	**Oral Hygiene** Chlorhexidine Mouthwash Hydrogen peroxide Mouthwash BP (Vincent's infection)
Section 3	**Oral ulceration and inflammation** *Saline mouthwash made with warm water for mild cases* Benzydaime oral rinse Benzydamine oromucosal spray +/- Chlorhexidine mouthwash (for secondary bacterial infections) Hydrocortisone muco-adhesive buccal tablets Beclomethasone 500microgram soluble tablets as a mouthwash Beclomethasone inhaler (unlicensed use – apply directly to the lesion)
Section 4	Oral bacterial infection – see antimicrobial guidelines and BNF https://bnf.nice.org.uk/treatment-summary/oropharyngeal-infections-antibacterial-therapy.html
Section 5	**Oral fungal infections** Nystatin Suspension Miconazole oromucosal gel Fluconazole capsules when topic not sutable or lesions non-reponsive to topical treatment

Back to Contents page

BNF Chapter 13 Skin	
1. Dry and Scaling skin disorders 2. Infections of the skin 3. Inflammatory skin conditions 4. Perspiration 5. Pruitus 6. Rosacea and acne 7. Scalp and Hair conditions 8. Skin cleaners, antiseptics and desloughing agents 9. Skin disfigurement 10. Sun protection and photodamage 12. Warts and calluses	
Section 1	**Dry and Scaling skin disorders** **MHRA Drug safety update-** Emollients and risk of severe and fatal burns: new resources available Epimax Original® cream Epimax Moisturising® cream (equivalent to E45® cream and replaces Exocream®) Epimax Isomol® gel(equivalent to Doublebase®) Epimax Ointment® (not be be applied to face) Epimax Oatmeal® cream (equivalent to Aveeno®) *If a pump is required zerobase 500g is most cost effective* **Products containing urea** Balneum® cream **Soap Substitutes** Please note these can be purchased cheaply over the counter; Epimax (can be held under warm/hot running water to give a foamy bath additive) Epimax Original® cream QV Gentle® wash **Emollient Bath Additives** ***Bath/shower emollients without antiseptic*** Emulsifying ointment (can be held under warm/hot running water to give a foamy bath additive) Hydromol® Bath and Shower QV Gentle® Wash *Other products as recommended by Dermatology* **Bath/shower products with antiseptic** - for use where infection is present or a frequent complication Dermol® 200 shower emollient Dermol 500 lotion Dermol® 600 bath emollient **Barrier Preparations** Conotrane® cream Medi Derma – S barrier cream Third line: Liquid paraffin:white soft paraffin (50:50) could be considered as an alternative if Conotrane® not available.
Section 2	**Infections of the skin** Refer to antibiotic guidelines on DGRegf Help NHS Dumfries & Galloway Antimicrobial Handbook | Right Decisions

Section2.1	**Bacterial skin infections** See the **MRSA Policy – Best Practice Guidelines** - on BEACONIC-129 MRSA Policy.pdf Mupirocin 2% ointment Chlorhexidine body wash 4% Octenidine ointment Octenidine body wash **Impetigo** *Reserve topical antibiotics for very localised lesions to reduce the risk of resistance.* Fusidic acid 2% cream (available from community pharmacies via Patient Group Direction (PGD) Fucibet® cream Crystacide® 1% cream for localised areas *Any queries contact Dermatology*
Section 2.2	**Fungal skin infections** Clotrimazole cream Terbinafine 1% cream 30g Miconazole 2% cream *If fungal infection suspected, please send off for skin scrapping first. This is to help reduce inappropriate prescription of creams*
Section 2.3	**Parasitic skin infections** *Please refer to NHS Dumfries and Galloway Public Health Policies for any changes in advice.* **Scabies***:* Scabies | Right Decisions Permethrin 5% cream Malathion 0.5% Ivermectin (on specialist advice) **Head lice:** Head lice | Health topics A to Z | CKS | NICE *Mousse, crème rinse and shampoo preparations are ineffective and should be avoided.* *The following are available through the Pharmacy First Scotland service at community pharmacies* Dimeticone 4% lotion Dimeticone 4% cutaneous spray Nitcomb - M2 or S1 Nitty Gritty NitFree Steel Nit Comb Malathion 0.5% aqueous lotion **Pubic lice** **DGRefHelp:** Pubic Lice | Right Decisions Malathion 0.5% aqueous lotion (Derbac M**)** Permethrin 5% cream (Lyclear Dermal cream)
Section 2.4	**Viral skin infections** Aciclovir 5% cream (herpes simplex) Please perform viral skin swab for confirmation
Section 3	**Inflammatory skin conditions**
Section 3.1	**Eczema and psoriasis** Ointments are recommended by Dermatology **As guided by ScriptSwitch in primary care for availability due to supply issues :** *Mild corticosteroid:* Hydrocortisone 1% *Moderately potent corticosteroid:* Audavate RD ® Betnovate-RD® Eumovate® *Potent corticosteroid:* Audavate ® Betnovate® Locoid® Mometasone

Very potent corticosteroid:
Clobetasol propionate 0.05%. When available- ClobaDerm® is the preferred brand. Length of treatment as per dermatologist

Steroids with antimicrobials (for short term use e.g. 7 days in infected eczema or as per dermatologist until skin is clear and back to normal)
Fucibet®

Preparations for psoriasis
Emollient see section 1

Mild/moderate topical corticosteroids *for face/flexures* see 13.3.1 Silkis®
(Calcitriol)
Dovonex® 30g ointment (Calcipotriol)
Dovobet® 60g gel/ointment (Betamethasone dipropionate 0.05%, Calcipotriol 50mcg)
Enstilar® foam spray (Betamethasone dipropionate 0.05%, Calcipotriol 50mcg)
Wynzora cream ®
Exorex® lotion (coal tar solution 5%)

Scalp Preparations
Betacap® Scalp Application (Betamethasone valerate 0.1%)
Diprosalic® Scalp Application (Betamethasone 0.05%, Salicylic acid 2%) 2nd line
Dovobet® gel (Betamethasone dipropionate 0.05%, Calcipotriol 50mcg). Enstilar foam spray
Sebco® (Coal tar 12%, Salicylic acid 2%)
Etrivex shampoo
Synalar® gel

<u>Specialist Use Drugs for Psoriasis</u>

***** Adalimumab – restricted to specialist use, prescribe by brand *****
Amgevita® SC injection - preferred biosimilar
For treatment of chronic plaque psoriasis in adult patients who failed to respond to or have a contraindication to or are intolerant to other systemic therapy including ciclosporin methotrexate or PUVA.

***** Ustekinumab - restricted to specialist use, prescribe by brand *****
Uzpruvo® SC▼ injection - preferred biosimilar

For the treatment of moderate to severe plaque psoriasis in adults who failed to respond to, or who have a contraindication to, or are intolerant to other systemic therapies including ciclosporin, methotrexate and psoralen and UVA treatment (PUVA).

For the treatment of moderate to severe plaque psoriasis in adolescent patients from the age of 12 years and older, who are inadequately controlled by, or are intolerant to, other systemic therapies or phototherapies.

***** Etanercept - restricted to specialist use, prescribe by brand *****

Benepali® SC injection – preferred biosimilar

Treatment of adults with moderate to severe plaque psoriasis who failed to respond to, or who have a contraindication to, or are intolerant to other systemic therapy, including ciclosporin, methotrexate or psoralen and ultraviolet-A light (PUVA)

***** Deucravacitinib (Sotyktu®) tablets – restricted to specialist use *****

For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to standard systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments.

	***** Tildrakizumab SC (Ilumetri®) injection - restricted to specialist use ***** For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to conventional systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments. ***** Certolizumab pegol SC (Cimzia®) injection – restricted to specialist use ***** For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to standard systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments. ***** Secukinumab SC (Cosentyx®) injection – restricted to specialist use ***** For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to standard systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments. ***** Guselkumab SC (Tremfya®) injection – restricted to specialist use ***** For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to conventional systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments. ***** Risankizumab SC (Skyrizi®) injection – restricted to specialist use ***** For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to conventional systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments. ***** Bimekizumab SC (Bimzelx®) injection – restricted to specialist use ***** For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to standard systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments. ***** Brodalumab SC (Kyntheum®) injection – restricted to specialist use ***** For the treatment of adults with moderate to severe plaque psoriasis who are candidates for systemic therapy. For use in patients who have failed to respond to standard systemic therapies (including ciclosporin, methotrexate and phototherapy), are intolerant to, or have a contraindication to these treatments. ***** Apremilast (Otezla®) tablets – restricted to specialist use ***** For the treatment of moderate to severe chronic plaque psoriasis in adult patients who failed to respond to or who have a contraindication to, or are intolerant to other systemic therapy including ciclosporin, methotrexate or psoralen and ultraviolet-A light (PUVA). ***** Dimethyl fumarate (Skilarence®) tablets – restricted to specialist use ***** For the treatment of moderate to severe plaque psoriasis in adults in need of systemic medicinal therapy. For use in patients in whom other non-biologic systemic treatments (methotrexate, ciclosporin and acitretin) are not appropriate or have failed and who are considered unsuitable for biologic therapy given their current disease state or personal preference.

	Specialist Use Drugs for Eczema Atopic Eczema ***** Dupilumab SC (Dupixent®) injection – restricted to specialist use ***** For the treatment of moderate-to-severe atopic dermatitis in adult patients who are candidates for systemic therapy. For use in patients who have had an inadequate response to existing systemic immunosuppressants such as ciclosporin, or in whom such treatment is considered unsuitable. ***** Baracitinib (Olumiant®) tablets – restricted to specialist use ***** **For the** treatment of moderate to severe atopic dermatitis in adult patients who are candidates for systemic therapy who have failed at least one current systemic immunosuppressant due to intolerance, contraindication or inadequate disease control. ***** Upadacitinib (Rinvoq®) tablets – restricted to specialist use ***** For the treatment of moderate to severe atopic dermatitis in adults and adolescents 12 years and older who are candidates for systemic therapy. **For** patients who have had an inadequate response to at least one conventional systemic immunosuppressant such as ciclosporin, or in whom such treatment is considered unsuitable. ***** Abrocitinib (Cibinqo®) tablets – restricted to specialist use ***** For the treatment of moderate-to-severe atopic dermatitis in adults and adolescents 12 years and older who are candidates for systemic therapy. For use in patients who have not responded to, or have lost response to, at least one systemic immunosuppressant therapy, or in whom these are contraindicated or not tolerated. ***** Tralokinumab SC▼ (Adtralza®) injection – restricted to specialist use ***** For the treatment of moderate-to-severe atopic dermatitis in adult patients who are candidates for systemic therapy. For use in patients who have had an inadequate response to an existing systemic immunosuppressant such as ciclosporin, or in whom such treatment is considered unsuitable. ***** Lebrikizumab SC▼ (Ebglyss®) injection – restricted to specialist use ***** For the treatment of moderate-to-severe atopic dermatitis in adults and adolescents 12 years and older with a body weight of at least 40 kg who are candidates for systemic therapy. For use in patients who have had an inadequate response to an existing systemic immunosuppressant such as ciclosporin, or in whom such treatment is considered unsuitable and where a biologic would otherwise be offered
Section 4	**Perspiration** Anhydrol Forte® (aluminium chloride hexahydrate 20%)

Section 4.1	**Hyperhidrosis** Pro- Banthine® - 15mg tds at least one hour before food. If side effects unbearable, take with food. **Hidradenitis Suppurativa (specialist use)** ***** Adalimumab – restricted to specialist use, prescribe by brand ***** **Amgevita® SC injection - preferred biosimilar** For treatment of active moderate to severe hidradenitis suppurativa (HS) (acne inversa) in adolescents from 12 years of age with an inadequate response to conventional systemic HS therapy. For the treatment of active moderate to severe HS (acne inversa) in adult patients with an inadequate response to conventional systemic HS therapy. ***** Secukinumab SC (Cosentyx®) injection – restricted to specialist use ***** For the treatment of active moderate to severe hidradenitis suppurative (HS) (acne inversa) in adults with an inadequate response to conventional systemic HS therapy.
Section 5	**Pruritus** **Nodular prurigo** ***** Dupilumab SC (Dupixent®) injection – restricted to specialist use ***** For the treatment of adults with moderate-to-severe prurigo nodularis (PN) who are candidates for systemic therapy.
Section 6	**Rosacea and acne**
Section 6.1	**Acne** See -DGRefHelp for treatment pathway Acne | Right Decisions **MHRA Drug safety update** Isotretinoin (Roaccutane▼): reminder of important risks and precautions Topical treatment: Management should always include topical treatments, with the choice based on the type and severity of acne: • **Initial treatment for non-inflammatory acne:** ○ Topical retinoid (e.g., Differin®), starting with 2-3 nights per week and increasing frequency as tolerated. ○ Azelaic acid (e.g., Finacea gel, Skinoren cream), which is well tolerated in preteens and teenagers. • **Inadequate response to initial treatment:** ○ Combination of Benzoyl peroxide (BPO) and topical retinoid (e.g., Epiduo®). ○ Review after 8 weeks, then every 4 months. ○ If still no response treat as inflammatory acne below. • **Initial treatment for inflammatory acne:** ○ Benzoyl peroxide (BPO) or ○ Topical retinoid (e.g., Differin®), starting with 2-3 nights per week and increasing frequency as tolerated or ○ Combination of Benzoyl peroxide (BPO) and topical retinoid (e.g., Epiduo®). ○ BPO and topical antibiotic (Duac) or retinoid/antibiotic (Treclin) • **Moderate inflammatory acne:** ○ Systemic antibiotics in combination with topical agents (BPO, Epiduo®, Differin®, or Azelaic acid). Tetracyclines are contraindicated in pregnancy and under 12s. ▪ Lymecycline 408 mg OD, ▪ Oxytetracycline 500 mg BD, ▪ Doxycycline 100 mg OD, ▪ Erythromycin 500 mg BD

	○ For female patients, Dianette® can be considered in combination with topical agents. • **Severe inflammatory acne:** ○ Refer all patients with severe acne for specialist assessment and consideration of oral isotretinoin ○ If the patient is female, ensure they are using appropriate contraception prior to referral for isotretinoin.
Section 6.2	**Rosacea** Rozex® cream/gel (Metronidazole 0.75%) Finacea® gel (Azelaic acid 15%) Soolantra ® cream Oxytetracycline tablets
Section 7	**Scalp and hair conditions** Alphosyl® 2 in 1 shampoo S elsun® shampoo Nizoral® (ketoconazole shampoo)
Section 7.1	**Alopecia** see BNF **Severe alopecia areata** ***** Ritlecitinib (Litfulo®) Capsules – restricted to specialist use ***** Treatment of severe alopecia areata in adults and adolescents aged 12 years and over
Section 7.2	**Hirsutism** Co-cyprindiol Cimizt® 30/150
Section 8	**Skin cleansers, antiseptic and desloughing agents** See the **MRSA Policy – Best Practice Guidelines** - on BEACON IC-129 MRSA Policy.pdf
Section 9	**Skin disfigurement** **Camouflages -** ACBS for disfiguring skin lesions Dermacolor®
Section 10	**Sun protection and photodamage** **Sunscreen preparations - ACBS for skin protection in photodermatoses** Anthelios Sunscreen lotion SPF 50+ Uvistat Sun Cream SPF 50 **Photodamage** Mild: Diclofenac sodium 3% gel (Solareze®) Moderate/Severe (specialist advice): tirbanibulin 10mg/g ointment (Klisyri®) Fluorouracil 5% cream (Efudix® Imiquimod 3.75% (Zyclara®) Imiquimod 5% (Aldara®)
Section 12	**Warts and calluses** Right Decisions Dermatology Pathway is available: Viral Warts | Right Decisions Please note some products can be purchased cheaply over the counter. The following are available through the Pharmacy First Scotland service at community pharmacies: Occlusal 26% Solution Salactol Paint Salatac gel Bazuka Extra Strength 26% gel (Diomed Developments Ltd) **Warts** DGRefHelp Advice from NHS D&G Sexual Health for the management of anogenital warts is available: Management | Right Decisions Podophyllotoxin 0.15% (Warticon®) or 0.5% alcoholic solution (Condyline®

	Imiquimod (Aldara®)

Back to Contents page

BNF Chapter 14 Immunological Products and Vaccines

For advice on immunological products/vaccines see the BNF and the green book https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book

All prescriptions for malaria prophylaxis should be on a private prescription if required. (Chloroquine and/or Proguanil can be purchased from pharmacies in the UK).

Patients should be advised by the surgery to visit fitfortravel.nhs.uk to check specific disease prevention recommendations for the country they will be visiting. This website also provides useful guidance on patients travelling with medication.
Many practices have their own procedure for handling and charging for travel vaccinations, medications and advice however, the following guidance may be helpful.
No charge (covered by GMS contract for patients registered with practice):

- **Cholera, Hepatitis A, Paratyphoid, Poliomyelitis, Smallpox, Typhoid**

Charge applies (not remunerated by the NHS as part of additional services):

- **Japanese encephalitis and tick-borne encephalitis, meningitis vaccines, rabies, tuberculosis (TB), yellow fever.**

NOTE There is no funding for provision of Hepatitis B vaccination for travel. Technically the practice may charge any patient a private fee, and write a private prescription for hepatitis B for travel, as long as it is not combined with hepatitis A, which must be given on the NHS [further clarification is given in the BMA website (bma.org.uk) – searching under hepatitis B and travel].

Back to Contents page