

The MHRA recommends that an unlicensed medicine should only be supplied in order to meet the special needs of an individual patient, where the patient's requirements cannot be met by use of a licensed medicine. Please note that any change or advice based on this information should be based on a medication review to ensure clinical appropriateness of therapy. Please note that advice is considered to be correct at time of writing, but may be subject to change, prices are subject to change within the drug tariff and all ULM's are subject to price changes by the wholesaler. Preparations may be available at similar costs from other wholesalers.

*****RECOMMENDATIONS ALWAYS TO BE USED IN CONJUNCTION WITH NEWT GUIDELINES*****

Updates	
Jun-22	All Items included in Part 7, any section is now listed as green, as per Tariff update. Please check current Tariff for current costs.

FOR NHS GGC PRESCRIBING TEAM INTERNAL USE ONLY

A

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Acetylcysteine Eye Drops Preservative Free	LICENSED Ilube® 5% eye drops are available but these contain preservative.		Unlicensed Special eye drops	5% preservative free included in Part 7S of Scottish Drug Tariff
Acetylcysteine	LICENSED effervescent tablets (NACSYS®), capsules, powder for oral solution (sachets), injection and solution for infusion available.		Unlicensed Special oral solution 50mg/5ml, tablets, capsules and effervescent tablets available.	
Alendronic acid	LICENSED 70mg/100ml oral solution (unit dose) SF, & 70mg effervescent tablets (Binosto®) available			Tablets not considered suitable for crushing due to risk of oesophageal damage. Swallowing difficulties, use licensed effervescent tablets or oral solution. Alternatively consider intravenous zoledronic acid once-yearly. See NEWT for further information.
Alfentanil nasal solution				5mg/5ml nasal solution spray included in Part 7S of Scottish Drug Tariff
Allopurinol		Tablets may be crushed. Please refer to NEWT guidance for clinical information relating to this.	Unlicensed Special oral solutions/suspensions available in various strengths.	100mg/5ml oral suspension included in Part 7S of Scottish Drug Tariff

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Aluminium acetate 13% eardrops			Unlicensed Special Ear Drops available	
Amiloride HCl	LICENSED 5mg/5ml SF oral solution available	Tablets may be crushed. Please refer to NEWT guidance for clinical information relating to this.		
Amiodarone	No LICENSED oral solution/suspensions available	Tablets may be crushed. Please refer to NEWT guidance for clinical information relating to this.	Unlicensed Special oral solutions/suspensions available in various strengths.	NHSGGC Adult Formulary note - restricted to specialist initiation. NHSGGC Paediatrics Formulary note - crush tablet, mix with water and give a proportionate dose.
Amisulpride	LICENSED 100mg/ml oral solution SF available		Use licensed product if possible Unlicensed Special oral suspension/solutions available in various strengths. Cost varies with strength and volume.	
Amitriptyline	LICENSED oral solution SF available in various strengths - 10mg/5ml, 25mg/5ml, 50mg/5ml	Tablets can be crushed and dispersed in water. See NEWT for further guidance.		
Amlodipine	LICENSED oral solution SF available in strengths 1mg/ml and 2mg/ml	Crush tablets & disperse tablet in water and give immediately (as drug is light sensitive). See NEWT for further guidance		
Amphotericin eye drops preservative free			Unlicensed Special eye drops	Note - amphotericin is restricted to specialist use only in NHSGGC Formulary.
Anoheal® (diltiazem 2% cream)	NHSGGC advise that licensed version of GTN ointment (Rectogesic®) available and should be considered prior to unlicensed special order for diltiazem			Consider GTN ointment or change to generic diltiazem 2% cream
Antacid and Oxetacaine				Listed in Part 7U of Scottish Drug Tariff

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Apixaban		Tablets can be crushed and dispersed in water, glucose 5%, apple juice, or apple puree. Please refer to NEWT guidance for clinical information relating to this		Refer to 'DOAC Prescribing in Patients with Non-Valvular AF and for the treatment and prevention of VTE Frequently Asked Questions' via http://www.ggcmedicines.org.uk/blog/mue-07-doac-prescribing/
Arovit oral drops 150,000 units/ml (vitamin A) (1 drop contains approx. 5000 units)				
Ascorbic acid	LICENSED tablets available	Use effervescent tablets if possible. Where lower doses are necessary, the effervescent tablets can be halved / quartered and dispersed in water, or the standard tablets can be crushed and mixed with water for administration. Please refer to NEWT guidance for clinical information relating to this	Unlicensed oral suspension/solutions available.	
Atorvastatin	LICENSED chewable 10mg & 20mg tablets available, and licensed suspension SF 4mg/1ml (20mg/5ml)	Atorvastatin can be crushed and mixed with water but not very soluble; residue left so incomplete dosing and may block tubes. Give immediately as the drug is light sensitive. See NEWT for further guidance		
Atropine sulphate eye Drops 1% P/F	LICENSED unit dose eye-drops available (Minims® atropine sulphate 1%)		Unlikely to need as licensed preparation available	NHSGGC Formulary advice: restricted to specialist use only,
Aveeno				ell
Azathioprine - DO NOT CRUSH		Caution - cytotoxic. Use unlicensed oral suspension. Wear gloves when handling suspension in case of contact with medication. See NEWT for further guidance.		Oral suspension 50mg/5ml x 150ml included in Part 7S of Scottish Drug Tariff. NHSGGC Formulary advice: Restricted to specialist initiation.

B

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

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Bendroflumethiazide	No LICENSED oral solution/suspension available	Tablets will disperse readily in water in one to five minutes. See NEWT for further guidance	Unlicensed Special oral suspension/solutions available.	Oral suspension 2.5mg/5ml x 150ml included in Part 7S of Scottish Drug Tariff
Benzalkonium chloride solution 1%				
Bepanthen®				Bepanthen® Nappy Care Ointment 5% included in Part 7U of Scottish Drug Tariff
Bio Melatonin® (see melatonin entry)	No longer available in the UK as a ULM, LICENSED Pharma Nord Melatonin 3mg tablets available and are an almost identical preparation. Refer to melatonin Shared Care Agreements (SCA) for latest guidance.			
Biotene® Dry Mouth Antibacterial Toothpaste Original				Included in Part 7U of Scottish Drug Tariff
Bioextra®				
Bisoprolol	Consider switching to alternative beta-blocker if clinically appropriate : atenolol (available as LICENSED SF liquid) (NB.DO NOT switch if for Heart Failure - seek advice)	Tablets can be crushed finely and mixed with water for administration. See NEWT for further guidance.	Unlicensed Special oral suspension/solutions available.	Oral suspension 2.5mg/5ml (150ml) included in Part 7S of Scottish Drug Tariff. Please refer to www.ggcmedicines.org.uk for Prescribing notes/restrictions in NHSGGC.
Blephagel®				Blephagel® eye gel 0.36% preservative free included in Part 7U of Scottish Drug Tariff
Blephasol®				Blephasol® preservative free lotion included in Part 7U of Scottish Drug Tariff

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SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

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Calciferol	See colecalciferol below			
Calcium carbonate	LICENSED preparations available (including calcium carbonate effervescent tablets and Calcichew® chewable tablets).		Unlikely to need: licensed products available	250mg dispersible tablets & various strengths of oral suspension may be available as unlicensed specials.
Captopril	LICENSED Captopril oral solution SF 5mg/5ml and 25mg/5ml	Captopril tablets will disperse in water in 1-5 minutes. See NEWT for further guidance		Captopril tablets have been given sublingually. To use this route the dose should be halved and given twice as frequently (i.e. 25mg twice daily becomes 12.5mg four times daily. Monitor blood pressure.
Carbamazepine	LICENSED preparations available (oral liquid, and suppositories)			In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations.
Carbimazole		Tablets may be crushed. Please refer to NEWT guidance for clinical information relating to this.	Unlicensed oral suspension available	
Carvedilol	Consider switching to alternative beta-blocker if clinically appropriate : atenolol (available as LICENSED liquid) (N.B. Do NOT switch if for Heart Failure)	Tablets can be dispersed to form a suspension in water. They disperse in 1-5 minutes. Use immediately. See NEWT for further guidance		
Cefuroxime eye drops (preservative-free option also available)				Please refer to www.ggcprescribing.org.uk for restrictions on prescribing. Principal side effect of the cephalosporins is hypersensitivity. Cross-reactivity between penicillin's and first and early second generation cephalosporins has been reported to occur in up to 10%, and for third-generation cephalosporins in 2-3%, of penicillin-allergic patients (please refer to BNF for further information).
Cetaphil®				Cetaphil® Body Cream and Gentle Skin Cleanser included in Part 7U of Scottish Drug Tariff
Chloral Hydrate	NB: drug considered less suitable for prescribing. LICENSED Chloral Hydrate 500mg/5ml and 143.3mg/5ml oral solution available.			

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Chlorothiazide		Tablets will disperse in water in less than a minute.	Unlicensed tablets and liquid preparations available	Costs vary with strength and volume
Chlorpromazine	LICENSED oral solutions available (25mg/5ml, 100mg/5ml)		Unlicensed preparations unlikely to be required	
Ciclosporin 0.2% eye ointment (preservative containing and preservative free options)				Please refer to www.ggcprescribing.org.uk for notes and restrictions on prescribing in NHSGGC.
Ciclosporin eye drops (preservative containing and preservative free options)	LICENSED preservative containing products are available (indications vary) Ikervis® 1mg/ml 0.3ml (0.1%) emulsion in single dose units (30 unit doses £72.00)- licensed in adults for treatment of severe keratitis in adult patients with dry eye disease, which has not improved despite treatment with tear substitutes Verkazia® 1ml/ml (0.1%) 0.3ml emulsion in single dose units (120 unit doses £288.00)- licensed for the treatment of severe vernal keratoconjunctivitis (VKC) in children from 4 years of age and adolescents.		Unlicensed eyes drops available.	Please refer to www.ggcprescribing.org.uk for notes and restrictions on prescribing in NHSGGC.
Ciprofloxacin 0.3% ear-drops	Use LICENSED (Cetraxal®) preparation, 2mg/ml unit dose vials		Ciprofloxacin or ofloxacin ear drops (both unlicensed) are available from 'special-order' manufacturers or specialist importing companies.	Unlicensed product unlikely to be required
Ciprofloxacin 0.2% eye-drops (preservative-free) multidose	LICENSED ciprofloxacin 0.3% eye drops (Ciloxan®). LICENSED levofloxacin preservative-free unit dose eye drops (Oftequix®) are preservative free alternatives.		Ciprofloxacin 0.2%w/v PF multidose eye drops (unlicensed) available.	Ciprofloxacin 0.2%w/v PF multidose eye drops - Not suitable for primary care. 24 hour in-use shelf-life as cannot be refrigerated.
Clindamycin		Open capsule and disperse contents in water or mix with grape juice or maple syrup (to mask unpleasant taste). Give immediately. See NEWT for further guidance.	Unlicensed Special oral suspension available.	Costs vary with volume and strength

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Clobazam	LICENSED oral suspensions available in various strengths: 1mg/ml (5mg/5ml) SF (Perizam®), 2mg/ml (10mg/5ml) SF(Perizam®), 5mg/5ml SF(Tapclob®), 10mg/5ml SF(Tapclob®)	Tablets can be dispersed or crushed and mixed with water, but unpleasant taste. See NEWT for further guidance.		Note - restricted to specialist initiation in NHSGGC Formulary. The MHRA has issued guidance recommending that (where possible) patients on clobazam (when used for seizures) are maintained on a specific manufacturer's product, due to variability in product characteristics which may lead to a loss of seizure control when switching between brands/manufacturers. All product switches should be carried out with care and close monitoring.
Clomipramine HCl	Consider switching to alternative if appropriate : amitriptyline, lofepramine, trazodone (available as LICENSED liquids)	Open capsules and disperse contents in water. See NEWT for further guidance.	Unlicensed 50mg/5ml oral suspension available.	Note - restricted to specialist initiation in GGC Formulary.
Clonazepam	Clonazepam 500mcg/5ml and 2mg/5ml oral solution SF are available as LICENSED products. For patients over 12 years of age - licensed liquid preparation can be used. For patients under 12 years of age , contact PSS	Use licensed liquid. See NEWT for further options/guidance on use in enteral tubes, as varies depending on type of tube	2.5mg/ml oral drops SF available from Aclardian Specials . Alcohol free ULM available from PSS	Note - restricted to specialist initiation in NHSGGC Formulary. The MHRA has issued guidance recommending that (where possible) patients on clonazepam (when used for seizures) are maintained on a specific manufacturer's product due to variability in product characteristics which may lead to loss of seizure control when switching between brands/manufacturers. All product switches should be carried out with care and close monitoring.
Clopidogrel		Tablets can be crushed and dispersed in water. Most brands disperse in one to five minutes without crushing.		75mg/5ml oral suspension included in Part 7S of Scottish Drug Tariff
Co-careldopa	Consider switching to LICENSED co-beneldopa (capsules/dispersible tablets).	Do not crush modified-release (CR) tablets. See NEWT for further guidance including dose conversion table.	Liquid special suspensions available of varying strengths to suit dose required.	6.25mg/25mg/5ml and 25mg/100mg/5ml oral suspension included in Part 7S of Scottish Drug Tariff
Cod Liver Oil				Cod Liver Oil capsules (400mg, 550mg and 1000mg) included in Part 7U of Scottish Drug Tariff

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Colecalciferol tablets/capsules	LICENSED tablets and capsules available in various strengths (see Appendix 1 for table of licensed colecalciferol preparations and costs). Some tablet formulations (e.g. Desunin®) are licensed to be crushed and given with food. Consult SPC's		Use of unlicensed specials should not be required.	Fultium D3 3,200iu excluded from NHSGGC Formulary. Invita D3 oral ampoules restricted to use only when other oral vitamin D preparations are not suitable. See NHSGGC – Vitamin D Supplementation: http://www.ggcprescribing.org.uk/blog/medicines-update-primary-care-february-2017/
Colecalciferol oral solution	Liquid preparations available in various strengths (see Appendix 1 for table of licensed colecalciferol preparations and costs). Fultium-D3® drops (3 drops = 200iu) and Thorens® drops (2 drops = 400iu) may be mixed with a small amount of cold or lukewarm food immediately prior to use. In infants, children and adolescents, Fultium-D3® drops can be mixed with a small amount of children's foods, yoghurt, milk, cheese or other dairy products.		Unlicensed special liquids available. Commercial oral drop preparations available (not licensed as a medicine).	Invita D3 oral ampoules restricted to use only when other oral Vitamin D preparations are not suitable. See NHSGGC – Vitamin D Supplementation: http://www.ggcprescribing.org.uk/blog/medicines-update-primary-care-february-2017/
Co-proxamol			Unlicensed tablets available	
Cyanocobalamin	LICENSED 50 microgram, 1mg tablets, and 1mg/ml solution for injection available (note-Cytacon® tablets/liquid, and Cytamen® injection not available on NHS prescription - included in schedule 1 ('blacklist'))	There is no information available on crushing tablets. No known suppliers of liquid preparations		Cyanocobalamin is considered in BNF as being less suitable for prescribing.
Cyclizine HCl	Consider switching if appropriate to alternative anti-emetic: metoclopramide or domperidone (available as LICENSED liquids)	Crush tablets and disperse in water. Protect from light. Note tablets have a bitter taste. See NEWT for further guidance.		Cyclizine 50mg/5ml suspension is included in Part 7S of the Scottish Drug Tariff

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Dabigatran	Consider change to other DOAC/NOAC if clinically appropriate. Rivaroxaban (Xarelto®) may be crushed and mixed with water or apple puree immediately prior to use and administered orally. Apixaban (Eliquis®) can be crushed and suspended in water, 5% dextrose in water (D5W), apple juice or apple puree for immediate oral administration. See NEWT for further information.	Dabigatran (Pradaxa®) capsules should not be opened. - Opening the capsules may greatly affect the oral bioavailability of the drug, with a risk of increased side effects (i.e. bleeding) therefore this should never be done. See NEWT for further guidance.	No suggestions for unlicensed dabigatran	Refer to 'DOAC Prescribing in Patients with Non-Valvular AF and for the treatment and prevention of VTE Frequently Asked Questions' via http://www.ggcmedicines.org.uk/blog/mue-07-doac-prescribing/
Dantrolene	No licensed solution	Open capsules and disperse contents in water or acidic fruit juice. See NEWT for further guidance.	Liquid special of varying strengths available.	25mg/5ml oral suspension x 200ml included in Part 7S of Scottish Drug Tariff.
Dekas Plus® sf oral liquid				Dekas Plus® sf oral liquid x 60 ml included in Part 7U of Scottish Drug Tariff
Dermacool®				Included in Part 7U of Scottish Drug Tariff - various strengths of cream, 0.5%, 1%, 2%, 5% available
Dexamethasone 0.1% eye drops preservative free	LICENSED Dropodex® and Minims® dexamethasone 0.1% single-use eye drops available			7 days shelf life once opened - store in fridge
Dexamethasone	LICENSED oral solution SF available: 2mg/5ml, 10mg/5ml, 20mg/5ml LICENSED soluble tablets available.	Tablets have been crushed and mixed with water for administration. They should be crushed with care to avoid inhalation of dust by the carer. See NEWT for further guidance re enteral tubes	Unlikely to need: licensed products available 500microgram/5ml unlicensed liquid available	
Dexamfetamine	LICENSED Dexamfetamine 5mg/ml oral solution SF available. See lisdexamfetamine entry for information on lisdexamfetamine if appropriate (please refer to SPC at EMC at medicines.org.uk for dexamfetamine and lisdexamfetamine equivalences).		Unlikely to need: licensed products available.	Note - restricted to specialist initiation in NHSGGC Formulary.
Diazepam	LICENSED preparations available (2mg/5ml liquid, 5mg, 10mg rectal tubes).		Unlikely to need: licensed products available	2.5mg/5ml and 10mg/5ml oral suspension included in Part 7S of Scottish Drug Tariff

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Diazoxide	LICENSED 50 mg tablets available (Eudemine®)	Use unlicensed suspension	Unlicensed diazoxide suspension available.	Costs vary depending on strength & volume Proglycem is favoured by some paediatric patients
Diclofenac	LICENSED suppositories and topical gel available. Do not crush / open enteric-coated or modified-release preparations.		50mg/5ml oral liquid special available	
Dilantin Infatabs				50mg tablets included in Part 7U of Scottish Drug Tariff
Diltiazem	No licensed solution	All tablets and capsules are labelled as modified-release, however the 60mg generic preparation is not slow-release and can be crushed. Patients on once or twice-daily modified-release preparations may need to be converted onto three-times-daily doses of the generic preparation.	Unlicensed suspensions of various strengths available.	
Diltiazem Hcl cream/gel/ointment 2%	NHSGGC advises that licensed version of GTN ointment (Rectogesic®) available and should be considered prior to unlicensed special order for diltiazem			Diltiazem 2% cream is included in Part 7S of the Scottish Drug Tariff. Diltiazem 2% ointment may also be dispensed against this listing in the Scottish Drug Tariff.
Dipyridamole	LICENSED capsules, tablets and suspension available A dosage adjustment is required when switching from modified-release capsules to suspension - see NEWT for guidance. Consider switch to clopidogrel if appropriate.	Use licensed SF suspension. See NEWT guidelines for further clinical guidance.	Unlikely to need: licensed products available.	
Donepezil	LICENSED orodispersible tablets 5mg and 10mg available. Licensed 1mg/ml (5mg/5ml) oral solution SF available		Unlikely to need: licensed products available.	
Dosulepin		Note- tablets have been crushed and capsules opened, but this is NOT recommended as the tablets are very hard and many brands are coated, and the powder has a local anaesthetic action. See NEWT for clinical guidance.	25mg/5ml and 75mg/5ml liquid specials available	

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Doxazosin		Most standard tablets readily disperse in de-ionised water, e.g. water for injection. Do not use tap water. Modified release tablets should not be crushed. See NEWT for further guidance.	Unlicensed liquid specials available.	
Doxycycline	LICENSED 100mg dispersible tablets available, and are scored for equal halving	Do not open capsules as contents are irritant.		

E

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E45®				E45® Dry Scalp Shampoo, E45® Junior Foaming Bath Milk included in Part 7U of Scottish Drug Tariff. Both products are non- formulary in NHSGGC
Emulsifying Wax Solution				3% solution included in Part 7S of Scottish Drug Tariff
Enalapril	No LICENSED oral solution. N.B. LICENSED ramipril and captopril liquids available if appropriate.	Tablets can be crushed and dispersed in water. Please refer to NEWT guidelines	Unlicensed Special liquids of various strengths available	
Entacapone		For swallowing difficulties option to crush tablets. Please refer to NEWT guidelines.		
Eosin 2% Solution				2% Solution included in Part 7S of Scottish Drug Tariff

E

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Epistatus® (midazolam) oromucosal solution and oromucosal solution pre-filled syringes	<p>LICENSED Epistatus® (10mg/ml) Oromucosal pre-filled syringe available</p> <p>Other Epistatus® preparations, pre-filled syringe and multi-dose bottle are unlicensed but included in part 7U of the Scottish Drug Tariff.</p> <p>Prescribers should not be prescribing/community pharmacist should not be supplying 10mg/ml pre-filled syringes (PFS) to deliver a dose less than 10mg as the syringes are not marked/graduated</p> <p>Buccal midazolam should be prescribed by brand name to ensure the correct product and strength is supplied.</p> <p>A change in product could have an adverse effect on patient safety as dosage, volume, administration and training will differ between products.</p>			All unlicensed Epistatus® preparations are included in Part 7U.
Ergocalciferol	<p>LICENSED ergocalciferol 300,000units/1ml solution for injection ampoules, and 1.25mg capsules, available.</p> <p>NOT NORMALLY INITIATED IN PRIMARY CARE</p>	Consider using a LICENSED colecalciferol liquid preparation.	Use of unlicensed specials should not be required - see colecalciferol.	Colecalciferol is the preferred form of vitamin D for prescribing in NHSGGC - please refer to Appendix 1 (colecalciferol).
Eucerin®				<p>Eucerin Dry Skin Relief 5% Face Cream With Urea®, and Eucerin Dermo Capillaire Calming Urea Shampoo® included in Part 7U of Scottish Drug Tariff.</p> <p>Both products are non-formulary in NHSGGC</p>

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Ferromate				Ferromate 210mg tablets included in Part 7U of Scottish Drug Tariff
Ferrous Sulfate	Consider switching to LICENSED Ironorm® (ferrous sulfate) drops, ferrous fumarate 140mg/5ml oral solution/syrup or Sytron® (sodium ferredate) elixir		Unlikely to need special oral solution: licensed products available.	
Fexofenadine	LICENSED Tablets available	1st choice - switch to an alternative antihistamine liquid, e.g. loratadine. 2nd choice - tablets can be crushed and mixed with water (without crushing they disperse in around 5 mins). See NEWT for guidance.		Various strengths and volumes available, price varies with strength
Flecainide		Tablets can be crushed and dispersed in de-ionised water (e.g. water for injection). Some sources do not recommend this. Do not use tap water. NB may have a local anaesthetic effect on tongue- use with care. See NEWT for further guidance,	Unlicensed Special liquid available	25mg/5ml x 300ml oral suspension included in Part 7S of Scottish Drug Tariff. Note - restricted to specialist initiation in NHSGGC Formulary.
Fludrocortisone Acetate		Crush tablets and disperse in water. Give immediately.	Unlicensed Special liquid available	
Fluoxetine	LICENSED capsules, tablets, dispersible tablets (Olena®) and oral solution available.	If licensed dispersible fluoxetine tablets are not suitable, consider the suitability of alternate day dosing with licensed liquid, rather than an unlicensed preparation. Alternate day dosing is possible due to the long half-life of fluoxetine and its active metabolite. Capsules have been opened and contents dispersed in 120ml of water, see NEWT for further guidance.	Unlikely to need: licensed products available.	

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Folic Acid	LICENSED 2.5mg/ml and 5mg/5ml liquid preparations available.	Crush tablets and disperse in water. Give immediately.	Unlikely to need: licensed products available	
Forceval®	LICENSED Forceval® capsules available.		Unlicensed Forceval® Soluble and Forceval Soluble Junior® tablets available	Forceval® Soluble and Forceval Soluble Junior® tablets included in Part 7U of Scottish Drug Tariff
Fosfomycin	LICENSED 3g sachets available	Granules can be dispersed in 90ml water for administration, or give by parenteral infusion if appropriate - see NEWT for guidance.		
Furosemide	LICENSED liquids available: 20mg/5ml, 40mg/5ml and 50mg/5ml (NB: Sugar-free, some brands contain alcohol)		Unlikely to need: licensed products available.	

G

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Gabapentin	LICENSED oral solution 50mg/ml SF available	Open capsule and dissolve contents in water or fruit juice or sprinkle onto food (to mask bitter taste). Use immediately as drug is rapidly hydrolysed. See NEWT for guidance on use with enteral feeding tubes, as varies depending on type of tube.	Liquid unlicensed suspensions of various strengths available. Use licensed strength if possible.	Please note when used for epilepsy, gabapentin is restricted to specialist initiation only as per NHS GGC Adult Formulary.
Gliclazide		For non-MR tablets: Crush well and mix with water or orange juice.	Liquid unlicensed special oral suspensions available.	40mg/5ml and 80mg/5ml liquid unlicensed specials available
Glucoboost				Glucoboost 40% gel 75g (3 x 25g) included in Part 7U of Scottish Drug Tariff
Glucose in glycerol nasal drops				Glycerdex nose drops are included in Part 3 of Scottish Drug Tariff
Glyceryl trinitrate ointment	NHSGGC advises that licensed version of GTN ointment (Rectogesic®) available and should be considered prior to unlicensed special order for GTN 0.2 % ointment or unlicensed diltiazem 0.2% cream/ointment.		Unlicensed products available	Glyceryl Trinitrate Ointment 0.2% included in Part 7S of Scottish Drug Tariff
Glycopyrronium bromide	LICENSED 1mg and 2mg tablets available. LICENSED 1mg/5ml oral solution & 400* micrograms/ml (*equivalent to 320 micrograms/ml of glycopyrronium) oral solution available. Consider hyoscine patches if appropriate.			NHSGGC paediatrics preparation of choice is licensed Sialanar® 320mcg/ml oral solution*. Licensed tablets and 1mg/5ml oral solution also used in paediatrics where appropriate.
Griseofulvin	No licensed griseofulvin liquid available in the UK. Consider switch to fluconazole which is available as a licensed liquid, if appropriate.	Drug is very insoluble, therefore, tablets unsuitable for crushing. Consider alternative treatment, e.g. terbinafine.	Unlicensed 125mg/5ml and 175mg/5ml oral suspensions available.	

H

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Haloperidol	LICENSED liquids available: 200mcg/ml SF, 5mg/5ml SF & 10mg/5ml SF	Open capsule and disperse contents in water.	Unlikely to need - licensed liquids available. Please select SF products 200 micrograms/ml SF = 1mg/5ml SF 5mg/5ml SF = 1mg/ml SF 10mg/5ml SF = 2mg/ml SF	Please refer to www.ggcprescribing.org.uk for prescribing notes/restrictions.
Hepa Merz (Granulat) 3000mg sachets (L-Ornithine-L-Aspartate)				
Hydrochlorothiazide	Consider LICENSED bedroflumethiazide tablets		No unlicensed liquids available. Unlicensed tablets available	Consider LICENSED bendroflumethiazide tablets
Hydrocortisone	Licensed soluble tablets available.	Standard tablets are insoluble, but will disperse in water for administration.	Unlicensed liquid preparations available	10mg/5ml oral suspension included in Part 7S of Scottish Drug Tariff. NHSGGC paediatrics note - usually use ordinary tablets dispersed in water for administration for majority of patients. Seek further advice from paediatrics.
Hydroxocobalamin	Consider LICENSED hydroxocobalamin injection 1mg/ml or LICENSED cyanocobalamin tablets 50 micrograms		No unlicensed liquid formulations available	
Hydroxycarbamide	Licensed capsules, tablets and oral solution available			Caution- the capsules are cytotoxic and should not be opened.
Hydroxychloroquine		Crush tablets and dissolve in water	Liquid unlicensed suspensions available.	Note - restricted to specialist initiation in NHSGGC Formulary.
Hyoscine butylbromide	LICENSED 10mg tablets, and 20mg/ml solution for injection ampoules available	Hyoscine butylbromide tablets should not be crushed. Injection can be given enterally.	Unlicensed hyoscine butylbromide 10mg/5ml oral suspension available	

H

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Hyoscine hydrobromide	Consider switching to LICENSED hyoscine hydrobromide (Scopoderm®) 1.5mg patch if appropriate.	Tablets may be sucked or dispersed in water for administration via enteral tube, although levels of absorption may vary with these methods. See NEWT for further guidance.	Unlicensed Special liquid available	
Hypromellose eye drops preservative free	LICENSED 0.3% preparations are available. If preservative free required, Tear-Lac® hypromellose 0.3%, 10ml, preservative free LICENSED non unit dose product is recommended. LICENSED Hydromoor® (hypromellose) 0.3% single dose units are available from wholesalers.		Unlikely to need: licensed products available	0.25% PFF drops 10ml included in Part 7S of the Scottish Drug Tariff

I

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Ichthammol 1% in YSP				1% in YSP included in Part 7S of the Scottish Drug Tariff
Imipramine HCl	LICENSED liquid available: 25mg/5ml oral solution SF	Crush tablets and mix with water. See NEWT for further guidance on use in enteral tubes.		
Indometacin	LICENSED suppositories available. Consider switching to paracetamol (available as soluble tablets, suspension and suppositories) or an alternative NSAID (ibuprofen suspension 100mg/5ml, diclofenac suppositories). (NB: consider GI/CV safety of different NSAIDs)	DO NOT crush tablets or open capsules: irritant.	Unlikely to need: licensed products available. Unlicensed oral suspension available.	Please refer to www.ggcprescribing.org.uk for prescribing notes/restrictions.
Isoniazid oral SF solution	LICENSED tablets available	Tablets can be crushed and mixed with water (NEWT Guidelines)		Isoniazid 50mg/5ml oral solution included in Part 7S of the Scottish Drug Tariff
Irbesartan	No licensed solution available. Consider changing to licensed ACEI or A2RA oral solution if appropriate.	Crush tablets and mix with water for immediate oral administration. Without crushing they disperse in around five minutes.		
Isosorbide mononitrate	No LICENSED liquid available. Consider changing to GTN patch if appropriate.	Standard release tablets can be crushed and dispersed in water. May have an increased rate of absorption. Theoretical potential for explosion but no reports. Do not crush MR tablets. Do not crush the modified-release tablets. If scored, they can be halved to make them easier for patients to swallow, but they should not be chewed.	Unlicensed liquid preparations available	

K

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Ketamine	LICENSED solution for injection available - ketamine for IV anaesthesia is restricted to specialist use only in NHSGGC Formulary.	Ketamine injection is intended for intravenous or intramuscular use. However, for certain indications it has been used orally, and for this injection solution has been diluted with fruit cordial to disguise the bitter taste. See NEWT for further guidance.	Unlicensed oral preparations available	50mg/5ml oral solution included in Part 7S of the Scottish Drug Tariff. Note - ketamine for IV anaesthesia is restricted to specialist use only in NHSGGC Formulary.

L

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Lasinoh®				
Lansoprazole	LICENSED orodispersible tablets available (e.g. Zoton FasTabs®). Orodispersible tablets are licensed for administration via NG tube, some capsules are also now licensed to be administered via NG tube Here	Use of lansoprazole in children is unlicensed. For guidance on use see NHSGGC Proton Pump Inhibitor Guideline for Neonates and Children. Please refer to NEWT guidelines for current advice for administration via feeding tubes	Unlikely to need: licensed products available	Note - orodispersible tablets restricted to specialist initiation in the Adult GGC Formulary for patients with narrow bore feeding tubes.
L-Arginine		No information on L-Arginine on NEWT guidelines. See NEWT guidelines for information on Arginine if appropriate.	Unlicensed L-Arginine 1.25g capsules, 100mg/1ml oral solution, 2g/5ml oral solution, 500mg tablets and 5g injection available	
Larvae				Supplied as unlicensed product via Community Pharmacy in NHSGGC. For further information, please refer to ggcprescribing.org.uk/other-formularies/non-medicines-formularies , for Unlicensed medicines protocol: Prescribing larvae (August 2020).
Levomepromazine	Licensed 6mg, 25mg & 50mg tablets and 25mg/ml solution for injection ampoules available.	Crush tablets and disperse in water. Tablets disperse immediately.	Unlicensed liquid specials of various strengths available.	For further information please refer to the Scottish Palliative Care Guidelines at www.palliativecareguidelines.scot.nhs.uk
Levothyroxine	LICENSED liquid formulations of various strengths available. Monitor thyroid function.	Crush tablets and mix with water.	Unlikely to need unlicensed oral solution: licensed products available.	NHSGGC Paediatrics note - vast majority of paediatric patients will be prescribed levothyroxine tablets rather than liquid form, crushing the tablets if necessary.
Lidocaine gel	LICENSED 5% ointment available. Licensed 2% cream available (Vagisil®). Consider switch to EMLA® cream (lidocaine 2.5% & prilocaine 2.5%) or Instillagel® (lidocaine 20mg/ml & chlorhexidine 500mcg/ml).		Unlicensed preparations available	Note - Please refer to NHS GGC Formulary at ggcmedicines.org.uk for prescribing notes/restrictions.
Lift® Glucose Juice Shot				Included in Part 7U of Scottish Drug Tariff.
Lift® Glucose Tablets				Included in Part 7U of Scottish Drug Tariff - Blueberry Burst, Juicy Raspberry, Tangy Orange, Zesty Lemon and Lime
Lisdexamfetamine dimesylate	Available as LICENSED 20mg, 30mg, 40mg, 50mg, 60mg and 70mg capsules (Elvanse®). Please note LICENSED dexamfetamine 1mg/ml oral SF solution available (refer to SPC for lisdexamfetamine and dexamfetamine equivalences).	.Elvanse capsule may be swallowed whole, or the capsule opened and the entire contents emptied and mixed with a soft food such as yoghurt or in a glass of water or orange juice and take immediately (SPC)		Please refer to ggcprescribing.org.uk for prescribing restrictions in NHSGGC.

L

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Lisinopril	LICENSED lisinopril 5mg/5ml oral solution (sugar-free) available	Tablets can be dispersed in water	UNLICENSED liquids available in various strengths	
Lofepramine	LICENSED 70mg/5ml suspension SF available.	Tablets are NOT suitable for crushing		
Loperamide	LICENSED oral solution SF 1mg/5ml available. Orodispersible tablets available.	Do NOT open capsule as they may cause enteral tube blockage and bioavailability may be altered. See NEWT for further guidance	Unlikely to need: licensed products available	
Lorazepam	Licensed lorazepam oral solution 1mg/ml SF available. Consider switching to diazepam if appropriate as LICENSED liquid available.	Crush tablets and mix with water. Give immediately. Tablets may be given sublingually if patient has sufficiently moist mouth	Liquid special suspensions of various strengths available.	1mg/5ml and 500microgram/5ml oral suspensions included in Part 7S of the Scottish Drug Tariff. Note please refer to NHS GGC Formulary at ggcmedicines.org.uk for prescribing restrictions.
L-Ornithine-L-Aspartate	Available as Hepa-Merz Granulat 3000 granules sachets (Imported (Germany))			
Losartan	Licensed tablets available in various strengths.	Crush tablets and disperse in water.	Unlicensed liquid specials available	

M

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Magnesium glycerophosphate (tablets/capsules)	LICENSED branded (Neomag [®]) & generic 4mmol chewable tablets are available. LICENSED oral powder for solution in 10mmol sachets is also available (Magnaspartate [®] (contains magnesium aspartate dihydrate)). See under oral solution/suspension below.	The licensed chewable tablets can be crushed and mixed with water for administration.	Unlicensed magnesium glycerophosphate 2mmol capsules and 0.4mmol capsules available. Unlicensed Magnaphate [®] (magnesium glycerophosphate 4 mmol (97mg Mg ²⁺) tablets are a gluten free alternative to licensed 4mmol chewable tablets. They may be chewed or crushed and mixed with water. Unlicensed 5mmol/5ml oral solution available (see below)	Note - the licensed magnesium preparations are included in the NHSGGC Total Formulary. It is important to establish the underlying cause of the hypomagnesaemia, rather than simply treating the deficiency. Caution should be exercised when switching between magnesium preparations due to differing bioavailability. (NB: Magnaphate [®] tablets are gluten-free).
Magnesium glycerophosphate oral solution/suspension	LICENSED Magnaspartate [®] 243mg powder for oral solution. Each 6.5 g sachet of powder contains magnesium aspartate dihydrate equivalent to 243 mg (10mmol) magnesium. Magnaspartate [®] can be dissolved in 50-200mL water, tea or orange juice. Stir solution in water until cloudy to transparent. In orange juice or tea inactive particles visible. Should be taken immediately after preparation.	The licensed chewable tablets can be crushed and mixed with water for administration.	Unlicensed 5mmol/5ml oral solution available. Magnaphate [®] (magnesium glycerophosphate 4mmol (97mg Mg ²⁺) tablets are a gluten free alternative to licensed 4mmol chewable tablets, They may be chewed or crushed and mixed with water.	Note - the licensed magnesium preparations are included in the NHSGGC Total Formulary. It is important to establish the underlying cause of the hypomagnesaemia, rather than simply treating the deficiency. Caution should be exercised when switching between magnesium preparations due to differing bioavailability. (NB: Magnaphate [®] tablets are gluten-free).
Mebeverine	LICENSED 50mg/5ml suspension SF available.		Unlikely to need: licensed products available	
Megestrol acetate (tablets)	LICENSED 160mg tablets available	Tablets can be crushed and given in fruit juice or jam (if crushed, preferably in water to reduce dust production). See NEWT for further guidance	Unlicensed 40mg tablets available	
Megestrol Acetate (suspension)	No LICENSED liquid available	Tablets can be crushed and given in fruit juice or jam (if crushed, preferably in water to reduce dust production). See NEWT for further guidance.	Unlicensed suspension, various strengths and quantities available	
Melatonin tablets/capsules	LICENSED products included the NHSGGC Shared Care Agreement (SCA) for children and adults are melatonin 3mg film coated tablets melatonin 2mg MR tablets and melatonin 1mg/ml oral solution. Other licensed products not recommended for use in NHSGGC are melatonin Tablet MR (Slenyto [®]) 1mg & 5mg melatonin 2mg, 3mg & 5mg hard capsules. For full details of licensed indications please consult relevant SPCs		Unlicensed solid and liquid formulations of melatonin are available in various strengths.	Melatonin 1mg/ml oral solution should only be used if crushing tablets is not an option or is unsuitable (see SCA). NHSGGC paediatrics note- usually do not use liquid

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SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Menadiol		Tablets can be crushed and mixed with water or food. See NEWT guidelines for further information.	Unlicensed 5mg/5ml oral suspension available	
Mepacrine				Note - GPs are recommended to discuss advice to patients and ongoing blood monitoring arrangements with hospital specialist prior to prescribing this medicine.
Mercaptopurine	LICENSED - Xaluprine® 20mg/ml oral suspension . LICENSED 50mg tablets.	No - Cytotoxic drug DO NOT OPEN CAPSULES	Unlicensed 10mg and 25mg tablets and varying strengths of oral liquid available	Note - if for inflammatory bowel disease restricted to specialist initiation, if for cancer restricted to specialist use only in NHSGGC Formulary. *Mercaptopurine tablets and oral suspension are not bioequivalent - haematological monitoring is advised when switching formulations.*
Metformin	LICENSED 500mg/5ml, 850mg/5ml, and 1000mg/5ml liquid, 500mg powder for oral solution available.		Unlikely to need: licensed products available	
Methyldopa		Crush tablets and mix with water. NB: Tablets are film coated and not very soluble, and have an unpleasant taste. See NEWT for updated guidance.	Use of an unlicensed suspension is preferred option rather than crushing tablets. See NEWT for further guidance.	
Methotrexate Injection	LICENSED product available			Note - if for Rheumatology (Metoject®) restricted to specialist initiation in NHSGGC Formulary, if for other indications - specialist use only.
Methotrexate	LICENSED 2mg/ml oral solution available	No - Cytotoxic drug DO NOT CRUSH		Note - If for cancer restricted to specialist use only in NHSGGC Formulary, if for other indications, restricted to specialist initiation.
Metoclopramide	LICENSED 5mg/5ml SF product available	See NEWT for updated guidance for enteral feeding.		
Metolazone	Licensed 5mg tablets available	Tablets can be crushed and mixed with water	Unlicensed metolazone tablets available. If swallowing difficulties, the tablets can be crushed and mixed with water. N.B. monitor the patient for postural hypotension due to increased bioavailability. A dose reduction may be necessary. See NEWT guidelines for more information.	
Metoprolol	Consider switching to alternative beta-blocker: atenolol (available as LICENSED liquid)	For non-MR tablets: Crush and disperse in water. NB: disperses very slowly. DO NOT Crush the MR tablets.	Unlicensed liquid and powder products available in various strengths	
Metronidazole	LICENSED suspension (200mg/5ml), suppositories available.		Unlikely to need: licensed products available	See NEWT guidelines for more information.

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SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Mexiletine	LICENSED 200mg (167mg) capsules available.	The capsules can be opened, and the contents dispersed in water for administration.	Unlicensed capsules and oral suspension available	
Miconazole 1% eye drops preservative free				28 day shelf life once opened - store at room temp
Midazolam (oromucosal vial and buccal pre-filled syringe)	Prescribers should not be prescribing/community pharmacist should not be supplying 10mg/ml pre-filled syringes (PFS) to give a smaller dose as the syringes are not marked A change in product could have an adverse effect on patient safety as dosage, volume, administration and training will differ between products. LICENSED Epistatus® (10mg/ml) oromucosal pre-filled syringe available. Other Epistatus® preparations, pre-filled syringe and multi-dose bottle are unlicensed but included in part 7U of the Scottish Drug Tariff. Buccal midazolam should be prescribed by brand name to ensure the correct product and strength is supplied.			Epistatus® 10mg/1ml 1ml Pre-filled syringe is a licensed product, not included in the Scottish Drug Tariff. Epistatus® 2.5mg/0.25ml, 5mg/0.5ml, 7.5mg/0.75ml and 10mg/ml 5ml vial is included in Part 7U of the tariff. Midazolam 2.5mg/0.25ml, 5mg/0.5ml and 7.5mg/0.75ml pre-filled syringes are included in Part 7S of the tariff
Midazolam (liquid)			Unlicensed 1mg/ml liquid available	
Midodrine	LICENSED midodrine 2.5mg and 5mg tablets available	Tablets can be crushed and mixed with water. Please refer to NEWT guidance.		
Mirtazapine	LICENSED preparations available (solution 15mg/ml (75mg/5ml) and orodispersible tablets)	Standard tablets can be crushed and mixed with water for administration via enteral tubes. See NEWT guidelines for most up to date information.	Unlikely to need: licensed products available	
Modafinil		Crush tablets and mix with water. Give immediately. For enteral feeding see updated NEWT guidelines.	Unlicensed oral suspension available	Note - restricted to specialist initiation in GGC Formulary.
Multivitamin				Multivitamin One-A-Day tablets and Valupak Multivitamin and Mineral One a Day included in Part 7U of Scottish Drug Tariff

N

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Nadolol	Could consider switching to an alternative beta-blocker (e.g. atenolol (which is also available as LICENSED liquid)). Discuss this with the patient's specialist or GP.	Tablets can be crushed and dispersed in water. Note LICENSED 80mg tablets are scored, so can be halved and then crushed for 40mg dose.	Unlicensed oral suspension in various strengths are and imported nadolol 40mg tablets available	As LICENSED Nadolol 80mg tablets are scored (see SPC), there should be no need to use unlicensed nadolol 40mg tablets
Naltrexone	LICENSED 50mg tablets available		Unlicensed special liquid and capsule products available in various strengths	1mg/ml suspension included in Part 7S of the Scottish Drug Tariff. UNLICENSED naltrexone capsules available. Note - restricted to specialist initiation in GGC Formulary.
Naproxen	LICENSED 25mg/ml & 50mg/ml oral suspension available.	Crush <u>standard</u> tablets and disperse in water.	Unlicensed Special oral suspension in various strengths available	Unlikely to require UNLICENSED formulation
Nifedipine	Short acting formulations of nifedipine are not recommended for angina or long term management of hypertension.	Consider switching to amlodipine: crush amlodipine tablets and disperse in water. Give immediately (light sensitive).	Unlicensed Special oral suspension and drops available	Note NHSGGC paediatrics - usually use 20mg/ml drops available via Clinigen

N

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Nitrazepam	LICENSED 2.5mg/5ml oral suspension available. Alternatively, consider switching to temazepam (LICENSED liquid available)		Unlicensed Special 5mg/5ml suspension available	
Nitrofurantoin	LICENSED liquid formulation available. (NB. oral suspension significantly more expensive than tablets/capsules)	For non-MR capsules, open capsules. Do not crush tablets as nitrofurantoin is irritant. Do NOT open MR capsules	Unlikely to need: licensed product available	
Neutrogena				Included in Part 7U of Scottish Drug Tariff Neutrogena® Norwegian formula intense repair foot cream Neutrogena® T/Gel 2 in 1 shampoo and conditioner Neutrogena® T/Gel shampoo for dry hair Neutrogena® T/Gel shampoo for greasy hair Neutrogena® T/Gel shampoo for sensitive scalp
Nystatin	LICENSED liquid formulation available		Unlikely to need: licensed product available	

O

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Octenisan				Octenisan antimicrobial wash mitt (10) included in Part 7U of Scottish Drug Tariff
Odaban				Odaban 20% 30ml included in Part 7U of Scottish Drug Tariff
Oilatum				Oilatum Bath Formula and Oilatum Scalp Intensive Shampoo included in Part 7U of Scottish Drug Tariff
Olanzapine	LICENSED orodispersible tablets available.		Unlicensed Special oral liquid available	Note - restricted to specialist initiation in NHSGGC Formulary.
Omeprazole	LICENSED oral suspensions are available in 10mg/5ml (2mg/ml) and 20mg/5ml (4mg/ml) strengths. Use of these products in neonates and children is not supported by paediatric specialists in NHSGGC. LICENSED orodispersible tablets available (e.g., Losec MUPS®)	Refer to current NHSGGC Proton Pump Inhibitor guidelines for Neonates and Paediatrics for the most current advice	Unlicensed omeprazole oral suspensions of various strengths are available but are not recommended for use in NHSGGC. Unlicensed omeprazole oral solution may be appropriate for some paediatric patients. For guidance see NHSGGC Proton Pump Inhibitor Guideline for Neonates and Paediatrics.	Note - orodispersible tablets are restricted in the Adult GGC Formulary for patients with narrow bore feeding tubes. Aclomep 20mg/5ml (4mg/ml) powder for oral solution is available from Alcardian, and may be appropriate for some paediatric patients. For guidance see NHSGGC Proton Pump Inhibitor Guideline for Neonates and Paediatrics.
	Here			
OroNac®				OroNac 600 Caps and OroNac 600 Tabs included in Part 7U of Scottish Drug Tariff
Oxybutynin	LICENSED sugar-free liquids available - please ask prescriber to select 'sugar-free' product to ensure licensed product supplied. LICENSED patches available if appropriate	NEWT advice: 1st line is transdermal patch (Kentera). 2nd line is licensed sugar-free solution.		Note - MR and patches restricted to specialist initiation in NHSGGC Formulary

P

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Papaverine Injection			Various strengths available	
Paravit®				Paravit-CF® capsules and Paravit-CF® SF liquid included in Part 7U of Scottish Drug Tariff
Penicillamine		Crush tablets and mix with water. Give immediately.	250mg/5ml Unlicensed liquid special available	Note - restricted to specialist initiation in NHSGGC Formulary.
Perindopril	Consider switching to alternative ACEI.	There are two salts of perindopril available - erbumine and arginine, and the doses are NOT equivalent. Note perindopril arginine is non-formulary in NHSGGC. For perindopril erbumine in swallowing difficulties, the tablets can be crushed and mixed with water. No information is available for perindopril arginine in enteral feeding or swallowing difficulties.	Unlicensed liquid special products available	Note perindopril 4mg tablets contain 4mg of perindopril tert-butylamine salt (see Rosemont entry*)
Phenobarbital (phenobarbitone)	Consider LICENSED 15mg/5ml elixir. Contains 38% alcohol - not suitable for children see comments.	Crush tablets and mix with water.	50mg/5ml special oral solution available	50mg/5ml Alcohol Free oral suspension included in Part 7S of the Scottish Drug Tariff. NHSGGC Formulary note - restricted to specialist initiation. Patients should be maintained on a specific manufacturer's preparation. Prescriptions should detail the manufacturer of the generic preparation. NHSGGC paediatrics note - elixir not suitable for children - usually use UNLICENSED alcohol free 50mg/5ml (Rosemont). Care is needed when switching between different preparations.
Phenytoin	LICENSED preparations available (liquid and chewable tablets). Care is needed when switching between different phenytoin preparations. Dose conversion required when changing from tablets/capsules to suspension.	Administration of suspension via enteral feeding tubes is not recommended. See comments.	90mg/5ml unlicensed special oral suspension available	NHSGGC Formulary note - restricted to specialist initiation in NHSGGC Formulary. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different brands and formulations. Phenytoin administration via enteral feeding tubes not recommended due to unpredictable absorption and interaction with enteral feeds, that affects bioavailability. Only use if no alternative. Patient response and levels need careful monitoring, especially after feeding regimen changes. Not for jejunum administration.

P

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Phytomenadione	LICENSED Neokay® phytomenadione 1mg capsules available. Konakion MM® paediatric injection is licensed for oral use in children and neonates, and the oral license is only for the prophylaxis of vitamin K deficiency bleeding.	Konakion MM® phytomenadione 10mg/ml Injection can be given intravenously under the product license. It can be given orally off license.	Unlicensed special products available - Phytomenadione 10mg tablets	Note - Licensed menadiol (water soluble) 10mg tablets are available and may be a suitable alternative for some patients. Check if clinically appropriate (fat soluble vs water soluble)
Pilocarpine HCl eye drops 0.5% P/F	LICENSED Minims® Pilocarpine Nitrate 2% eye drops available (20x0.5ml)			Note - restricted to specialist initiation in NHS GGC Formulary.
Pirenzepine			Available as Gastrozepin 50mg tablets - unlicensed in UK.	Mental Health specialist use only. If prescribed for hyper salivation from clozapine - should be obtained via Leverndale Hospital.
Potassium acid phosphate	No LICENSED preparation		Unlicensed Special 13.6% (1mmol/ml) oral solution available	Treatment will <u>usually</u> stop prior to discharge.
Potassium Chloride	LICENSED preparations available: Sando-K effervescent tablets; Kay-Cee-L syrup (5mmol/5ml) (dilute before use).		Unlicensed liquid special 7.5% (1mmol/ml = 5mmol/5ml) product available but use licensed first line. Unlicensed modified release tablets available.	
Pravastatin	Consider LICENSED simvastatin liquid or LICENSED atorvastatin chewable tablets	Crush tablets and mix with water. Give immediately.	Unlicensed liquid special preparations available	
Prednisolone sodium Phosphate Eye Drops P/F	LICENSED 0.5% unit dose available (Minims® Prednisolone Sodium Phosphate)		Unlicensed specials available	0.1% P/F drops 10ml included in Part 7S of the Scottish Drug Tariff. Note - restricted to specialist initiation in NHS GGC Formulary.
Pregabalin	LICENSED liquid preparation available (20mg/ml oral solution SF)	Open capsules and mix in water. May taste unpleasant.	Unlikely to need: licensed products available. Unlicensed oral suspension available	Note - if for epilepsy, restricted to specialist initiation in NHS GGC Formulary. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations.

P

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Primidone	LICENSED 50mg and 250mg tablets available	Crush tablets and disperse in water.	Unlicensed oral suspensions available in various strengths.	Note - restricted to specialist initiation in NHSGGC Formulary. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations.
Probenecid			Unlicensed tablets can be crushed and dispersed in water	
Procyclidine	LICENSED SF liquid formulations available.	Use syrup/oral solution or give by parenteral injection. See NEWT for guidance.	Unlikely to need: licensed product available	
Propranolol	LICENSED SF liquid formulations available.		Unlikely to need: licensed product available	
Pyridostigmine Bromide	LICENSED 12mg/ml (60mg/5ml) now available		Unlicensed liquid special products available in various strengths	Note - restricted to specialist initiation in NHSGGC Formulary.
Pyridoxine HCl		Crush tablets and mix with water.	Unlicensed liquid special products available in various strengths	
Pyrimethamine		Crush tablets and mix with water or juice.	2mg/ml liquid unlicensed special product available	

Q

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U JUNE 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Quetiapine	Licensed solution available - 20mg/ml sugar free suspension	For non-MR tablets: Crush and mix with water or add to soft food (e.g. yoghurt) (to mask bitter taste). Give immediately. Do NOT crush MR tablets	Unlikely to be needed as licensed liquid now available: Liquid special suspensions of various strengths available	12.5mg/5ml, 25mg/5ml and 50mg/5ml strengths of oral suspension included in Part 7S of the Scottish Drug Tariff. Note - restricted to specialist initiation in NHS GGC Formulary. NB: there may be opportunity to optimise to more cost-effective dose
Quinoderm				Quinoderm® Facewash included in Part 7U of Scottish Drug Tariff

R

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Ramipril	LICENSED 2.5mg/5ml oral solution SF available	Tablets can be crushed and dispersed in water. Open capsule and place contents directly into the mouth or onto bread or disperse in water or mix with apple juice or apple sauce (to mask unpleasant taste). Give immediately	Unlicensed liquid specials available.	5mg/5ml oral solution included in Part 7S of the Scottish Drug Tariff
Rapilose 40% gel®				Rapilose® 40% gel and Rapilose® OGTT included in Part 7U of Scottish Drug Tariff
Restasis® Ophthalmic Emulsion 0.05% (ciclosporin)				Note - Ciclosporin for dermatology or rheumatology restricted to specialist initiation in NHSGGC Formulary.
Riboflavin	No licensed product available		Unlicensed m/r tablets, capsules and oral liquids available	May be useful in preventing migraines (UKMI). Note there is no licensed riboflavin product available in the UK.
Rivaroxaban	Rivaroxaban 1mg/ml oral suspension sugar free available as a LICENSED product.	Tablets can be crushed as a licensed indication depending on type of tube. Refer to NEWT.		Refer to 'DOAC Prescribing in Patients with Non-Valvular AF and for the treatment and prevention of VTE Frequently Asked Questions' via http://www.ggcmedicines.org.uk/blog/mue-07-doac-prescribing/

S

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Selenium	LICENSED - 100mcg/2ml, 500mcg/10ml unit dose amps/vials		Unlicensed tablets available (SelenoPrecise® 200mcg and 100mcg tablets).	
Sertraline	If clinically appropriate, consider switching to alternative SSRI. Fluoxetine (available as LICENSED liquid) or citalopram (available as LICENSED oral drops)	Crush tablets and disperse in water or mix with food. Give immediately. NB: tablets taste bitter and have an anaesthetic effect on the tongue so care should be taken with hot meals after administration.	Liquid unlicensed special suspension available	Sertraline 50mg/5ml Oral Suspension included in Part 7S of the Scottish Drug Tariff
Seven Seas® Concentrated Cranberry Forte				Seven Seas® Concentrated Cranberry Forte 200mg capsules included in Part 7U of Scottish Drug Tariff
Sildenafil	LICENSED chewable tablets and LICENSED oral suspension 10mg/ml available	Tablets can be crushed and dispersed in water.	Liquid unlicensed special products available in various strengths	Note - if for pulmonary vascular disease, restricted to specialist use only in NHSGGC Formulary. NHSGGC paediatrics note - licensed product now available (Revatio®).
Simvastatin	Consider switch to atorvastatin chew tabs as first line statin if appropriate. Alternatively LICENSED Simvastatin 20mg/5ml and 40mg/5ml suspension available	Crush tablets and disperse in water. Give immediately (light sensitive).	Unlikely to need: licensed products available	
Sodium Acid Phosphate 1mmol /ml (15.6% w/v) oral solution	No LICENSED products available			Martindale preparation contains ethanol and chloroform and should be avoided in neonates. Treatment is <u>usually</u> stopped prior to discharge

S

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Sodium benzoate			Available as unlicensed special in various formulations	Included in NHSGGC Paediatric Formulary for use in metabolic disorders (500mg tablets, 100mg/ml oral solution, 20% injection).
Sodium Bicarbonate Tablets				Sodium Bicarbonate Tablets 600mg included in Part 7U of Scottish Drug Tariff
Sodium Bicarbonate Oral Solution 8.4%	LICENSED 84mg/ml oral solution available (equivalent to 1mmol/ml sodium). NHS GGC preparation of choice is Bidex.	Sodium Bicarbonate 500mg capsules available. Open capsules and mix contents with water. The injection can be given enterally.		Note - restricted to specialist initiation in GGC Formulary.
Sodium Chloride Oral Solution	LICENSED 1mmol/ml (292.5mg/5ml) and SodiClor 5mmol/ml (1.46g/5ml) oral solution available (must be diluted in drinks, breast milk or formula feed before administration).		Unlicensed liquids in various strengths available	Note - restricted to specialist initiation in NHSGGC Formulary. Sodium Chloride Oral Solution 5.13mmol/ml (1.5g/5ml) (30%) and 5mmol/ml (1.46g/5ml) (29%) included in Part 7U of Scottish Drug Tariff.
Sodium chloride (Slow Sodium tablets)	Licensed tablets available	EMC advises Slow Sodium tablets should be swallowed whole with water (approx. 70ml per tablet where kidney function is normal to avoid hyponatraemia), and not chewed		
Sodium chloride 5% Preservative Free Eye Drops	Sodium Chloride 5% preservative-free drops available (10ml and unit dose (20x0.05ml)) Part 3 SDT - Appliances			
Sodium chloride 5% Eye Drops (contains preservative)	Sodium Chloride 5% (10ml bottle) Part 3 SDT - Appliances (see comments)			Registered as a Medical Device. This product is not suitable for tear replacement or lubrication therapy. Use of this product should only be initiated by an appropriate ophthalmic specialist. Sodium Chloride 5% - £25.25 (10ml) (Alissa Healthcare)

S

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Sodium Chloride Eye Ointment 5%	Sodium Chloride 5% ointment (5g preservative free tube Part 3 SDT - Appliances)			
Sodium Cromoglicate 2% Eye Drops Preservative Free	Licensed Catacrom® unit dose eye-drops available			
Sodium Valproate		Refer to NEWT guidelines for advice on crushing tablets	Unlikely to need: licensed products available	Note - restricted to specialist initiation in NHSGGC Formulary. Prescribe by brand name. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations.
Solgar Copper Chelate Tablets 2.5mg				Can be obtained as OTC product
Solifenacin	Consider switching to alternative. LICENSED oxybutynin 2.5mg/5ml oral solution available.	Crushing the tablet is not recommended. Consider changing to alternative treatment e.g. tolterodine tablets quickly disperse in water.	Unlicensed special oral suspension 10mg/5ml available	Consider changing to alternative treatment e.g. tolterodine, oxybutynin.
Sotalol	Consider switching to alternative beta-blocker: atenolol or propranolol (that are available as LICENSED liquids)	Crush tablets and mix with water	Unlicensed special oral suspension available. Unlikely to need: alternative licensed products available	Note - restricted to specialist initiation in NHSGGC GGC Formulary.
Spatone® Original				Spatone® Original sachets included in Part 7U of Scottish Drug Tariff
Spironolactone		Crush tablets and mix with water.	Unlicensed suspension of various strengths available	50mg/5ml and 25mg/5ml oral suspension included in Part 7S of Scottish Drug Tariff
Sucralfate	LICENSED 1g/5ml oral suspension available via wholesalers.		UNLICENSED 1g tablets available	
Sulfapyridine		No information available in NEWT	UNLICENSED 250mg capsules available	
Sunsense®				Sunsense® Daily Face Cream SPF 50+ and Sunsense® Sensensitive Cream SPF 50+ included in Part 7U of Scottish Drug Tariff
Systane® Lid Wipes				Systane® Lid Wipes included in Part 7U of Scottish Drug Tariff

T

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Tacrolimus	Consider using LICENSED Modigraf® sachets. Bioavailability differs between brands. For advice on dose conversion refer to NEWT guidelines.	Information relating to administering via feeding tubes, see NEWT guidelines. For swallow issues convert to granules for suspension. See NEWT guidelines for more information.	5mg/5ml oral suspension available as unlicensed special product	5mg/5ml oral suspension included in Part 7S of Scottish Drug Tariff. Note - restricted to specialist initiation in NHS GGC Formulary. Tacrolimus preparations should be prescribed by brand name. Increased monitoring recommended if changing brands.
Tamoxifen	LICENSED liquid formulation 10mg/5ml SF available.	Caution - carcinogenic. The tablets could be crushed and mixed with water for enteral tube administration, or crushed tablets mixed with jam or yoghurt for oral administration. HOWEVER, NOT GENERALLY RECOMMENDED AS CARER WOULD REQUIRE TO USE A MASK, EYE PROTECTION AND GLOVES TO REDUCE EXPOSURE TO THE DUST AND CRUSHED TABLETS. See NEWT guidelines for more information.	Unlikely to need: licensed products available	
Tamsulosin	LICENSED Prolonged release capsules and tablets available.	Tablets are modified-release and should not be crushed. Capsules are modified-release and not suitable for opening for tube administration. Capsules contain granules which should not be crushed. If no alternative is suitable, they may be mixed with cold water and swallowed whole (only suitable for patients able to follow the instruction not to chew). It should usually be possible to switch the patient to an alternative therapy. Please refer to NEWT guidance		
Terbinafine		Crush tablets and mix with water	Unlicensed oral suspension available	
Tetrabenazine		Crush tablets and mix with water.	Unlicensed liquid specials available	Note - restricted to specialist initiation in NHS GGC Formulary.

T

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Theophylline	Licensed tablets available	Do not crush modified-release tablets. See NEWT for further guidance (please note Nuelin tablets are discontinued).		
Thiamine		Crush tablets and disperse in water.	Unlicensed liquid specials available	Thiamine 100mg/5ml Oral Solution included in Part 7S of the Scottish Drug Tariff
Thioridazine	Review continuing need - consider alternatives	Some brands of thioridazine tablets will disperse in water, others will not. Incompatible with some feeding tubes. See NEWT for further guidance		
Tizanidine		Crush tablets and mix with water.	2mg/5ml SF liquid specials available	Note - restricted to specialist initiation in NHSGGC Formulary.
Tolterodine	No licensed liquid available. LICENSED oxybutynin oral solution SF as alternative available if suitable.	Crush standard tablets and disperse in water. Use immediately.	Unlicensed oral liquid available	
Topiramate	LICENSED "Sprinkle" capsules available (sprinkle contents on soft food and swallow immediately without chewing). LICENSED 10mg/ml (50mg/5ml) and 20mg/ml (100mg/5ml) oral suspension available.	Crush tablets and disperse in water (NB bitter taste) See NEWT for further guidance,	Unlikely to need: licensed products available	Note - restricted to specialist initiation in NHSGGC Formulary. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations.
Tranexamic acid	No licensed solution or mouthwash	Crush tablets and mix with water.	Liquid unlicensed special suspensions of varying strengths and 5% mouthwash	500mg/5ml oral solution included in Part 7S of Scottish Drug Tariff

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SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Trazodone	LICENSED liquid available but very EXPENSIVE. Consider licensed tablets or capsules (see comments)	Do not crush tablets. Open capsules and add contents to small volume of water or soft food stuffs and administer immediately (unpleasant taste). Please refer to NHS GGC clinical guideline (see below). See NEWT for further guidance Clinical Guideline		
Trientine Dihydrochloride	LICENSED tablets/capsules available	Not listed in NEWT guidelines		
Trihexyphenidyl HCL	LICENSED liquid formulation 5mg/5ml oral syrup available	Tablets will disperse in water for administration in swallowing difficulties See NEWT for further guidance	Unlikely to need: licensed products available. 2mg/5ml and 1mg/5ml oral unlicensed suspension special available.	

U, V, W & Z

SCOTTISH DRUG TARIFF PART 7M, 7S,7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Urea Oint 25%	Consider Flexitol® / Dermatonics heel balm (Urea 25% balm)			
Ursodeoxycholic Acid	LICENSED 250mg/5ml suspension SF available	Can crush tablets and mix with water but limited solubility. Do not open capsules.	Unlikely to need: licensed products available	Note - restricted to specialist initiation in NHSGGC Formulary.
Valproic Acid (Depakote®)	Valproic acid and sodium valproate are not directly interchangeable. However, could consider review and change to LICENSED Epilim® liquid 200mg/5ml with care. NB: there are pharmacokinetic differences; take care when switching. See NEWT guidelines for more information. Further Specialist Pharmacy Service (SPS) guidance on switching between formulations is available.	Not recommended to crush Depakote tablets	Liquid unlicensed special available - valproic acid suspension 500mg/5ml	Note - restricted to specialist initiation in NHSGGC Formulary. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations. Changing from valproic acid tablets to sodium valproate liquid in swallowing difficulties is the preferred option to consider in NHSGGC. NEWT states 'there is no officially recommended dose conversion between the two products, due to their differing pharmacokinetics. However it would seem sensible to convert patients on Depakote to the same dose of sodium valproate liquid and monitor the clinical effect'. Further Specialist Pharmacy Service (SPS) guidance on switching between formulations is available
Vancomycin	Licensed capsules available	The injection can be diluted with 30mL water for injection and given enterally. The expiry of the reconstituted injection depends upon the brand. Do not administer vancomycin capsules via enteral tubes/swallowing difficulties.	Liquid unlicensed special available	NEWT guidelines advice (May 2020): 1st Choice -unlicensed solution 2nd Choice - injection given orally or via enteral tube
Venlafaxine	LICENSED* oral solution SF 37.5mg/5ml and 75mg/5ml launched November 2021	For non MR tablets: crush and mix with water or jam. MR capsules: Open capsule and mix with smooth food e.g. yoghurt. NB: DO NOT crush contents		*Note; LICENSED 75mg/5ml oral solution contains sesame oil
Verapamil	LICENSED liquid 40mg/5ml oral solution SF available		Unlikely to need: licensed products available	
Vitamin D3 (see calciferol and colecalciferol entries)	LICENSED products available			
Vitamin E (tocopheryl)	LICENSED products available: Vedrop® 50mg/ml oral solution (D-alpha tocopherol (as tocofersolan), Alpha tocopheryl acetate 500mg/5ml oral suspension		Vitamin E supplements available in various strengths from wholesalers including E-tabs 100mg chewable tablets (alpha tocopheryl acetate) For other products check NHS Blacklist before prescribing	

U, V, W & Z

SCOTTISH DRUG TARIFF PART 7M, 7S,7U June 2022

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
Warfarin	LICENSED liquid 1mg/ml available. Monitor INR closely if changing the patient's preparation	Crush tablets and mix with water (2nd choice after licensed liquid if swallowing difficulty). Without crushing, tablets will disperse in water in 2 to 5 minutes. For PEG feeding, refer to NEWT as advice varies depending on type of tube. Monitor INR closely if changing preparation patients receive.	Unlikely to need: licensed products available	
Zolpidem	LICENSED tablets available	Tablets can be crushed and mixed with water for administration.		
Zonisamide	LICENSED 20mg/ml (100mg/5ml) oral suspension available	Capsules can be opened and contents sprinkled onto apple sauce or chocolate pudding, or mixed with water or apple juice. See NEWT for guidance.	Liquid special available	In NHSGGC Formulary - restricted to specialist initiation. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations. Consider the risks and benefits carefully before agreeing to administer the medication in an unlicensed manner.
Zopiclone	Consider switching to temazepam (available as LICENSED liquid).	Tablets UNSUITABLE for crushing or dissolving	Liquid unlicensed special available.	Zopiclone 3.75mg/5ml Oral Suspension included in Part 7S of the Scottish Drug Tariff

Specials Contact Numbers

NHSGGC Central Prescribing Team

Community pharmacists should e-mail PRESCRIBING@ggc.scot.nhs.uk for authorisation or advice

Authorisation is not required if:

- The product is listed in Part 7S or 7U of the Scottish Drug Tariff
- The product can be sourced from NHS manufacturing units in Scotland with no requirement for authorisation. For units in England or Wales authorisation is required.
- Previous authorisation has been obtained in the last 12 months and, the patient, the GP practice, the product, the supplier and the cost are all unchanged. Re-authorisation is required if the price increases by > 20% (or if anything else changes in the prescription).

GP's should contact their local community pharmacist or local Prescribing Support Team for advice.

Some NHS GGC commonly used Specials manufacturers/suppliers contact numbers

(NHS units commonly used in NHS GGC in bold)

Manufacturer / Supplier Name	Telephone No.	Fax No. / email
AAH Pharmaceuticals, Polmadie Road Glasgow Warehouse	0141 423 5888 outwith 8.30am - 7pm	0141 423 7662
AAH Specials	0121 344 5702 Specials	
AAH Retail	0344 561 6699 General Switchboard	
Aclardian Specials	01954 213490	info@aclardian.com
Alliance Healthcare Coatbridge	0344 8544 998	
Alum Medical	020 8238 6770	enquiries@alummedical.com
Arjun	0800 015 7806	info@arjunproducts.co.uk
BCM Specials	0333 032 9301	specials.bcm@tareva.com
Bristol Myers Squibb	01244 586 250	01244 586251
Clinigen Group PLC	01932 824100	01932 824300 ukcustomerservice@clinigenengroup.com
Durbin PLC	020 8869 6501	OnDemand@DurbinGlobal.com
Eaststone	0800 678 3102	0800 678 3101
Eclipse	0800 298 0078	
Ennogen	01322 629220	claire@ennogen.com info@ennogen.com
Ethigen	01355 598154	
Ethypharm (formerly known as Martindale)	0800 137 627	0800 393360
Huddersfield Royal Infirmary	01484 355388	Fax: 01484 355377
Mandeville Medicines	01296 394 142	01296 397223
Martindale/Ethypharm	0800 137 627	0800 393360
Mawdsley's	0844 736 9016	0161 7426444 unlicensed@mawdsleys.co.uk
Nova Laboratories	0800 975 4840	sales@novalabs.co.uk
Oxford Pharmacy Store	01865 904 141	01865 337 550
Pharma Nord	01670 534901	01670 534902
Phoenix Healthcare	0844 736 1130	
Quantum Specials (part of Clinigen group)	01207 279400	
Rayner Pharmaceuticals (formerly Moorfields)	020 7684 9090	
Rokshaw Laboratories	0191 5106500	0191 5675210
Rosemont	0800 919312	
The Specials Laboratory	0800 028 4925	orders@specialslab.co.uk
SLA Pharmacy	01923 681 001	01923 616 950
St Mary's Hospital	0203312 6666	
Stockport Pharmaceuticals	0161 419 5666	0161 419 5426
Target Healthcare Limited	0845 618 0036	specials@target-healthcare.co.uk
PSS (formerly Tayside Pharmaceuticals)	01382 632 052	01382 632 060
Torbay NHS Pharmacy Manufacturing Unit	01803 664 707	01803 664 354
UL Global Pharma	01923 204310	orders@ul-globalpharma.com
Veriton Pharma (previously Special Products Ltd)	01932 690325	01932 341091
Waymade	01268 535200	Whole.sale@waymade.co.uk
WEP Clinical	0208 0048185	

TABLE OF LICENSED COLECALCIFEROL PREPARATIONS		
Colecalciferol strength and formulation	Brand name and manufacturer	Pack size
400unit capsules	InVita D3* 400unit capsules (Consilient Health Ltd)	28
	Colecalciferol 400 unit capsules (Alissa Healthcare Research Ltd.)	30
800unit capsules/tablets	Colecalciferol 800 unit capsules SCOTTISH DRUG TARIFF PART 7	30
	Desunin* 800unit tablets (Mylan)	30
	Desunin* 800unit tablets (Mylan)	90
	Fultium-D3* 800unit capsules (Thornton & Ross Ltd)	30
	Fultium-D3* 800unit capsules (Thornton & Ross Ltd)	90
	InVita D3* 800unit capsules (Consilient Health Ltd)	28
	Strivit-D3* 800unit capsules (Strides Pharma UK Ltd)	30
	Stexerol-D3* 1000 unit tablets (Kyowa Kirin Ltd)	28
1,000unit tablets/capsules	Colecalciferol 1000 unit capsules (Colonis Pharma Ltd)	30
	Colecalciferol 1000 unit capsules (Alissa Healthcare Research Ltd)	30
	Colecalciferol 1000 unit capsules (Consilient Health)	30
	Colecalciferol 1000 unit capsules (Consilient Health)	30
2,400units/ml oral drops SF (400 units/ 6 drops)	InVita D3* 2,400units/ml oral drops (Consilient Health Ltd)	10ml
2,740units/ml oral drops SF (200 units/3 drops)	Fultium-D3* 2,740units/ml oral drops (Thornton & Ross Ltd)	25ml
3,200unit capsules *	Strivit-D3* 3,200unit capsules (Strides Pharma UK Ltd)	30
	Fultium-D3* 3,200unit capsules (Thornton & Ross Ltd)	30
	Fultium-D3* 3,200unit capsules (Thornton & Ross Ltd)	90
4,000unit tablets	Desunin* 4,000unit tablets (Mylan)	70
5,600unit capsules	InVita D3* 5,600unit capsules (Consilient Health Ltd)	4
10,000units/ml oral drops SF (200 units/drop)	Thorens* 10,000units/ml oral drops (Galen Ltd) 10 ml	10ml
	Thorens* 25,000units/2.5ml oral solution (Galen Ltd)	4x2.5ml
	Thorens* 25,000units/2.5ml oral solution (Galen Ltd)	2.5ml
10,000 unit tablets/capsules	Colecalciferol 10,000 unit capsules (Alissa Healthcare Research Ltd)	20

Colecalciferol strength and formulation	Brand name and manufacturer	Pack size
15,000units/5ml oral solution	Colecalciferol 3,000units/ml oral solution (Thame Laboratories Ltd)	100ml
20,000unit capsules	Colecalciferol 20,000 unit capsules SCOTTISH DRUG TARIFF PART 7	30
	Strivit-D3* 20,000unit capsules (Strides Pharma UK Ltd)	10
	Strivit-D3* 20,000unit capsules (Strides Pharma UK Ltd)	20
	Colecalciferol 20,000unit softgel capsules (Tor Generics Ltd)	20
	Fultium-D3* 20,000unit capsules (Thornton & Ross Ltd)	15
	Fultium-D3* 20,000unit capsules (Thornton & Ross Ltd)	30
	Plenachol* 20,000unit capsules (Accord Healthcare Ltd)	10
25,000unit tablets /capsules	Stexerol-D3* 25,000unit tablets (Kyowa Kirin Ltd)	12
	Thorens* 25,000 unit capsules	3
	Thorens* 25,000 unit capsules	12
	InVita D3*25,000unit capsules (Consilient Health Ltd)	3
	InVita D3* 25,000units/1ml oral solution (Consilient Health Ltd)	3
40,000unit capsules	Plenachol* 40,000unit capsules (Accord Healthcare Ltd)	10
50,000unit capsules	InVita D3* 50,000unit capsules (Consilient Health Ltd)	3
50,000units/1ml oral solution unit dose ampoules SF**	InVita D3* 50,000units/1ml oral solution (Consilient Health Ltd)	3

**Restricted on formulary

Prices from Dictionary of medicines and device browser accessed 31/05/2021

Notes –**Non- preferred/restricted formulations shaded in table. Most cost effective formulations in bold in table**

15,000 units/5ml liquid formulations are expensive – preferably do not use.

20,000 unit solid formulation – Now on SDT Part 7 so prescribe generically as per Scottish Government policy.

25,000 unit solid formulation –Thorens 25,000 unit caps are most cost effective

50,000 unit solid formulation - Invita D3 50,000 unit caps are cost effective

The MHRA recommends that an unlicensed medicine should only be used when a patient has special requirements that cannot be met by use of a licensed medicine. Please note that any change or advice based on this information should be based on a medication review to ensure clinical appropriateness of therapy.

Please note that advice is considered to be correct at time of writing but may be subject to change, costs are subject to change within the tariff and all ULM's are subject to cost change by the wholesaler. Preparations may be available at similar costs from other wholesalers. Prepared by Prescribing Team, Inverclyde HSCP.

FOR NHS GGC PRESCRIBING TEAM INTERNAL USE ONLY

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****GGC DERMATOLOGY SPECIALS****SCOTTISH DRUG TARIFF PART 7M,7S, 7U June 2022**

Drug	Option 1: Use a licensed medicine in a suitable licensed formulation (incl review ongoing need or change to different drug in same therapeutic class)	Option 2: Use a licensed medicine in an unlicensed manner (e.g. crushing tablets)	Option 3: Only if clinical reason exists for not using licensed product: Use an unlicensed special	Comments
**Cade Oil 12% in Yellow Soft Paraffin				Various preparations and sizes available
**Cade Oil 12%, Salicylic Acid 6% & Sulphur 6% in Emulsifying Ointment				Various preparations and sizes available
**Cade Oil 6%, Salicylic Acid 3% & Sulphur 3% in Emulsifying Ointment				Various preparations and sizes available
**Coal Tar in WSP				Various preparations and sizes available
**Coal Tar in YSP				Coal Tar Solution 2% in YSP, and Coal Tar Solution 5% in YSP included in Part 7S of Scottish Drug Tariff
**Coal Tar Paste	Consider switching to LICENSED, commercially available coal tar preparation if appropriate e.g. Carbo-Dome (coal tar 10%). Cocois scalp ointment (Coal Tar 12%, Salicylic acid 2%, precipitated sulphur 4%), Psoriderm cream (coal tar 6%, Lecithin 0.4%)			
**Coal Tar 2% with Salicylic Acid 2% in Emulsifying Ointment				

**Coal tar soln 5% Betameth Val. 0.025% Oint				Topical steroids should not be diluted or mixed with any other products. Use licensed proprietary preparations e.g. use licensed strengths of topical steroids.
**Dithranol in Yellow Soft Paraffin				Dithranol in Yellow Soft Paraffin is generally Hospital Only
**Dithranol in Lassar's Paste				
**Glycopyrrolate in Water				Note - in anaesthesia restricted to specialist use only in GGC Formulary.
Glycopyrronium in Cetomacrogol Cream				This is a high cost item product, cost varies on strength and volume

**Ichthammol 1% and Zinc Oxide 15% in YSP (Special Ointment No1)				Included in Part 7S of the Scottish Drug Tariff
**Ichthammol 10% Ointment				
**Ichthammol 1% in Calamine Liniment				
**Lassar's Paste				
**Menthol in Aqueous Cream				
**Reflective (Dundee) Sunscreens - various shades				Reflectant Sun Screen (Beige, Coffee, Coral Pink) included in Part 7S of Scottish Drug Tariff

**Salicylic Acid in Aqueous Cream			Salicylic Acid 5% in Aqueous Cream and Salicylic Acid 10% in Aqueous Cream included in the NHS GG&C Total Formulary as Special Order products	Salicylic Acid 2% in Aqueous Cream, Salicylic Acid 5% in Aqueous Cream, and Salicylic Acid 10% in Aqueous Cream included in Part 7S of the Scottish Drug Tariff. Salicylic Acid in Aqueous Cream 5% and 10% preparations are included in the NHS GG&C Total Formulary as Special Order products.
**Salicylic Acid 2% and Sulphur 2% in Aqueous Cream				
**Salicylic Acid in Emulsifying Ointment				Salicylic Acid 2% in Emulsifying Ointment, Salicylic Acid 5% in Emulsifying Ointment, Salicylic Acid 10% in Emulsifying Ointment included in Part 7S of Scottish Drug Tariff

**Salicylic Acid in Yellow Soft Paraffin				Salicylic Acid 5% in YSP, and Salicylic Acid 10% in YSP included in Part 7S of Scottish Drug Tariff. Salicylic Acid in Yellow Soft Paraffin 5% and 10% preparations are included in the NHS GG&C Total Formulary as Special Order products
**Special Ointment No 1	See Ichthammol 1% in Zinc Oxide 15% in Yellow Soft Paraffin			
**Trichloroacetic Acid Paste				
**Urea in White Soft Paraffin				