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 | | | | | |
|---------|---|--|--|--|--|
| Mar-24 | Please note: this resource has exceeded its review date. Please exercise caution in the use of the resource. | | | | |
| Dec-23 | Update to Scottish Tarrif entries, update to specials manufacturer costs. | | | | |
| Jun-23 | A number of entries have been removed from Scottish Drug Tariff. This document has been updated accordingly. | | | | |
| Nov-22 | All Items included in Part 7 of the Scottish Drug Tariff, is now listed as green, as per Tariff update. Please check current Tariff for prices . | | | | |

FOR NHS GGC PRESCRIBING TEAM INTERNAL USE ONLY

Α

| 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 | Known Supplier |
|---|--|---|--|---|---|
| Acetylcysteine Eye Drops Preservative Free | LICENSED Ilube® 5% eye drops are available but these contain preservative. | | Unlicensed Special eye drops | | Available from various ULM providers including; Rokshaw Laboratories |
| 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. | | Available from wholesalers |
| 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 zolendronic acid once-yearly. See NEWT for further information. | |
| Alfentanil nasal solution | | | | 5mg/5ml nasal solution spray included in Part 7S of Scottish Drug Tariff | Available from various ULM providers including; Aclardian, Prulab Pharma Oxford Pharmacy Store (OPS) Rokshaw |

| 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 | Known Supplier |
|-----------------------------------|--|--|--|---|--|
| 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. | Scottish Drug Tariff. NB this is interchangable | Available from various ULM providers including; Aclardian Specials Oxford Pharmacy Store (OPS) Rokshaw Laboratories Rosemont |
| Aluminium acetate 13% eardrops | | | Unlicensed Special Ear Drops available | | PSS- (90 day shelf life) |
| Amiloride HCI | LICENSED 5mg/5ml SF oral solution available | Tablets may be crushed. Please refer to NEWT guidance for clinical information relating to this. | | | Wholesalers |

| 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 | Known Supplier |
|---|--|---|---|---|---|
| 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. | Available from various ULM providers including; 1. Aclardian Specials 2.Rokshaw Laboratories |
| 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. | | Available from various ULM providers including; Rokshaw Laboratories |
| 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. | Moorfield's (pf 0.005mg in 0.1ml Intravitreal Pack) - 4 weeks shelf life (Store in fridge) *HOSPITAL ONLY* |
| 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 | Anoheal® - SLA Pharmacy - supplied via Alliance Healthcare. 2 year shelf life, store in fridge and use within 4 weeks. Diltiazem 2% cream available from various suppliers. Please see diltiazem entry. Generic diltiazem 2% cream included in Part 7S. |
| Antacid and Oxetacaine | | | | Listed in Part 7U of Scottish Drug Tariff | Available from various ULM providers including; Rosemont |
| 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 available at www.ggcmedicines.org.uk/media/uploads/ps_extra/mu_extra_07_doac_mar18.pdf | |

| 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 | Known Supplier |
|------------------------------|--|---|--|----------------|
| Arovit oral drops 150,000 | | | | |
| units/ml (vitamin A) (1 drop | | | | Italian Import |
| contains approx. 5000 units) | | | | |

| 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 | Known Supplier |
|---------------------------------------|--|---|--|---|--|
| 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. | | The Specials Laboratory - 100mg/5ml, 500mg/5ml |
| 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, | |
| 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. NB this is interchangable with solution as per updated circular. NHSGGC Formulary advice: Restricted to specialist initiation. | Available from various ULM providers including; Aclardian Specials Oxford Pharmacy Stores (OPS), Rokshaw Laboratories Rosemont |

В

| 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 | Known Supplier |
|--|--|--|--|---|--|
| 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. NB this is interchangable with solution as per updated | Available from various ULM providers including; Rosemont (Fridge line) Aclardian Specials Rokshaw Laboratories |
| Benzalkonium chloride solution 1% | | | | | PSS - 1 year expiry |
| 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 | | | | Biotene included in Part 7U of Scottish Drug Tariff | Available from wholesalers |
| Bioxtra® | | | | | Various preparations listed in Part 3 of Scottish Drug Tariff |
| 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. | included in Part 7S of Scottish Drug Tariff. NB this is interchangable with solution as per updated circular .Please refer to www.ggcmedicines.org.uk | Aclardian Specials |

С

| 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 | Known Supplier |
|--|--|--|--|---|---|
| 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. | Available from wholesalers |
| 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 | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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 | | | Available from various ULM providers including; 1. PSS 2. Aclardian Specials 3. Rokshaw |
| 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). | PSS |
| Chloral Hydrate | NB: drug considered less suitable for prescribing. LICENSED Chloral Hydrate 500mg/5ml and 143.3mg/5ml oral solution available. | | | | |

| 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 | Known Supplier |
|---|---|---|--|---|---|
| Chlorothiazide | | Tablets will disperse in water in less than a minute. | Unlicensed tablets and liquid preparations available | Costs vary with strength and volume | Available from various ULM providers including; 1. Aclardian Specials 2. Rosemont 3. Rokshaw Laboratories 4. Eaststone 5. The Specials Laboratory |
| 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) | roomganii) | | гединей | Please refer to www.ggcprescribing.org.uk for notes and restrictions on prescribing in NHSGGC. | Available from various ULM providers including; 1. Moorfield's 2. Aclardian Specials (PF) 3. Rokshaw Laboratories (PF) 4. Oxford Pharmacy Stores (OPS) (pf) |
| Ciclosporin eye drops (preservative containing and preservative free options) | LICENSED preservative containing products are available (indications vary) lkervis® 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. | Available from various ULM providers including; 1. Aclardian Specials (Restasis®) 2. Oxford Pharmacy Store (Restasis®) 3. Rokshaw Laboratories |
| 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 (Oftaquix*) 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. hour in-use shelf-life as cannot be refrigerated. | |

| 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 | Known Supplier |
|------------------|--|---|--|--|--|
| 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 | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories 3. Oxford Pharmacy Stores (OPS) |
| 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 HCI | 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. | Available from various ULM providers including; Aclardian Specials |
| 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. | oral drops) |
| Clopidogrel | | Tablets can be crushed and dispersed in water. Most brands disperse in one to five minutes without crushing. | | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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. NB this is interchangable with solution as per updated circular | Available from various ULM providers |
| Cod Liver Oil | | | | Cod Liver Oil capsules (400mg, 550mg and 1000mg) included in Part 7U of Scottish Drug Tariff | Available from various wholesalers |

С

| 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 | Known Supplier |
|------------------------------|---|---|---|--|---|
| | 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/vitamin-d-prevention-treatment-of-deficiency-1/ | |
| 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/vitamin-d-prevention-treatment-of-deficiency-1/ | Oxford Pharmacy Stores Aclardian Specials Licensed Thorens® available via wholesalers Eaststone |
| Co-proxamol | | | Unlicensed tablets available | | Available from various ULM providers including; Rokshaw Laboratories |
| 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 HCI | 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. NB this is interchangable with solution as per updated circular | Available from various ULM providers including; Aclardian Specials Rokshaw Laboratories |

D

| 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 | Known Supplier |
|--|--|---|--|---|--|
| 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 www.ggc.medicines.org.uk/blog/medicines-update-extra/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. NB this is interchangable with solution as per updated circular | Available from various ULM providers including; St Mary's - 6 month shelf life Aclardian Specials Rokshaw Laboratories |
| 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 | Available from wholesalers |
| 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/5ml 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. | Available from wholesalers |
| 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. NB this is interchangable with solution as per updated circular | Available from various ULM providers including; Rosemont Rokshaw Laboratories |
| 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 | Available from various ULM providers including; 1. Aclardian Specials 2. Oxford Pharmacy Stores (OPS) 3. Rokshaw Laboratories |
| Diclofenac | LICENSED suppositories and topical gel available. Do not crush / open enteric-coated or modified- release preparations. | | 50mg/5ml oral liquid special available | | Available from various ULM providers including; 1. Rosemont 2. Aclardian Specials 3. Rokshaw |

D

| 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 | Known Supplier |
|--|--|---|--|--|---|
| 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. | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw |
| 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. NB this is interchangable with Ointment as per updated circular | Available at various ULM providers including; Oxford Pharmacy Store (OPS) Aclardian Rokshaw |
| 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. | | Available from wholesalers |
| 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 | | Available from various ULM providers including; 1. Rosemont 2. Aclardian |
| 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. | | Available from various ULM providers including; 1. Rosemont 2. Rokshaw Laboratories 3. Aclardian Specials |
| Doxycycline | LICENSED 100mg dispersible tablets available, and are scored for equal halving | Do not open capsules as contents are irritant. | | Unlikely to require ULM preparation | |

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2023

| 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 | Known Supplier |
|--------------------------|--|---|--|--|--|
| Emulsifying Wax Solution | | | | 3% solution included in Part 7S of Scottish Drug Tariff | Available from various ULM providers including; Rokshaw Laboratories |
| 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 | | Available from various ULM providers including; 1. Rosemont 2. Aclardian Specials 3. Rokshaw Laboratories |
| 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 | Available from various ULM providers including; PSS Rokshaw Laboratories |
| Epistatus | Epistatus® (midazolam) oromucosal solution and oromucosal solution pre-filled syringes LICENSED Epistatus® (10mg/ml) oromucosal pre-filled syringes available in 2.5mg/0.25ml, 5mg/0.5ml, 7.5mg/0.75ml and 10mg/1ml strengths. Epistatus® 10mg/ml multi-dose bottle (5ml) preparation is unlicensed. Please note that pre-filled syringes cannot be used to give part doses, there are no integrations on the syringe. Buccal midazolam should be prescribed by brand name to ensure the correct product and strength is supplied. A change in product could have an adverse effect on patient safety as dosage, volume, administration and training will differ between products. | | | Epistatus® 10mg/1ml , 2.5mg/0.25ml, 5mg/0.5ml | 1. Buccolam® (10MG/2ML)- Licensed preparations 2. Epistatus® (10MG/1ML) - Veriton. Available via Alliance and Oxford Pharmacy Stores (OPS) |
| Ergocalciferol | LICENSED ergocalciferol 300,000units/1ml solution for injection ampoules, and 1.25mg capsules, available. NOT NORMALLY INITIATED IN PRIMARY CARE | 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). | |

E

F

| 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 | | Known Supplier |
|-------------------------|--|--|--|--|---|
| Ferrous Sulfate | Consider switching to LICENSED Ironorm® (ferrous sulfate) drops, ferrous furnarate 140mg/5ml oral solution/syrup or Sytron® (sodium ferededate) 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 | Available from various ULM providers including; 1. Rokshaw 2. Ethigen |
| 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. NB this is interchangeable with solution as per updated circular. Note - restricted to specialist initiation in NHSGGC Formulary. | Available from various ULM providers including; Aclardian Rosemont |
| Fludrocortisone Acetate | | Crush tablets and disperse in water. Give immediately. | Unlicensed Special liquid available | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories 3.The Specials Laboratory |
| Fluoxetine | LICENSED capsules, tablets, dispersible tablets (Olena®) and oral solution available. | Capsules have been opened and contents dispersed in 120ml of water, see NEWT for further guidance. | Unlikely to need: licensed products available. | | |
| 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 | | |
| 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. | | | Available from wholesalers |
| 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

| 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 | Known Supplier |
|---------------------------------|---|--|--|---|--|
| 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. | akle onto food (to imediately as drug Liquid unlicensed suspensions of various strengths available. Use licensed strength where possible. Value onto food (to imediately as drug of the possible of the pos | | Available from various ULM providers including; 1. Rokshaw Laboratories 2. Rosemont 3. Aclardian |
| Gliclazide | | For non-MR tablets: Crush well and mix with water or orange juice. | iquid unlicensed special oral suspensions available. 40mg/5ml and 80mg/5ml liquid unlicensed specials | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories 3. UL Medicines 4. Oxford Pharmacy Store |
| Glucose in glycerol nasal drops | | | | Glycerdex nose drops are included in Part 3 of Scottish Drug Tariff | Arjun (via wholesalers) - Glycerdex 25% PSS (20%) - 3 month expiry |
| 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 | Available from various ULM providers including; Aclardian Specials Rokshaw Laboratories PSS |
| | 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. | | Available from various ULM providers including; 1. Aclardian Specials 2. IPS |

н

| 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 | Known Supplier |
|--|---|--|---|---|--|
| 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) | | | | | Available from various ULM providers including; 1. Clinigen 2. Aclardian |
| Hydrochlorothiazide | Consider LICENSED bedroflumethiazide tablets | | No unlicensed liquids available. Unlicensed tablets available | Consider LICENSED bendroflumethiazide tablets | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw |
| Hydrocortisone | Licensed soluble tablets available. | Standard tablets are insoluble, but will disperse in water for administration. | Unlicensed liquid preparations available | NHSGGC paediatrics note - usually use ordinary tablets dispersed in water for administration for majority of patients. Seek further advice from paediatrics | Available at various ULM providers including: 1. Rosemont: 5mg/5ml - (150ml), 2. Aclardian Specials - oral suspension: 5mg/5ml - (100ml), 10mg/5ml 3. Oxford Pharmacy Stores: 5mg/5ml oral suspension - (100ml) 4. Rokshaw Laboratories |
| 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. | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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 | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |

Н

| 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 | Known Supplier |
|-----------------------|---|--|--|----------|---|
| 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 | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |

- 1

| 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 | Known Supplier |
|----------------------------|--|---|--|---|---|
| Ichthammol 1% in YSP | | | | 1% in YSP included in Part 7S of the Scottish Drug Tariff. NB this is interchangable with WSP as per updated circular | Available from various ULM providers including; Rokshaw Laboratories PSS |
| Imipramine HCI | 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. | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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. NB this is interchangable with suspension as per updated circular | Aclardian Specials |
| 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 | | Available from various ULM providers including 1. Aclardian Specials 2. Rokshaw Laboratories |
| Ivermectin | No licensed UK preparation available | Children under 3 years should have dose and condition reviewed by a specialist. Dose for treatment of resistant scabies is 200micrograms/kg in patients greater than 15kg. | | | Available from various ULM providers |

| 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 | Known Supplier |
|----------|---|---|--|---|---|
| Ketamine | ketamine for IV anaesthesia is restricted to | 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 quidance. | Unlicensed oral preparations available | Scottish Drug Tariff. Note - ketamine for IV anaesthesia is restricted to specialist use only in NHSGGC Formulary | Available from various ULM providers including; Aclardian Oxford Pharmacy Store (OPS) Rosemont Rokshaw Laboratories The Specials Laboratory |

L

| 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 | Known Supplier |
|-----------------------------|---|--|--|---|--|
| Lasinoh® | | | | | Available from wholesalers |
| Lansoprazole | Zotion Fash abselp. Orloaispersible tablets are licensed for administration via NG tube, some capsules are also now licensed to be administered via NG tube | 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 | Here | No information on L-Arginine on NEWT guidelines for solution, 2g/5ml oral solution, 500mg tablets and 5g injection | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw | |
| 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). | Primary Care Only Biomonde Phone: 0845 230 1810 Fax: 01656 668047 Email: orders@biomonde.com |
| Levomepromazine | LICENSED 6mg, 25mg & 50mg tablets , 5mg/ml (25mg/5ml) Oral Solution and 25mg/ml solution for injection ampoules available. | Crush tablets and disperse in water. Tablets disperse immediately. | | For further information please refer to the Scottish Palliative Care Guidelines at www.palliative careguidelines.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. | Available from various ULM providers including; 1. Ethigen 2. Aclardian Specials 3. Rokshaw Laboratories |
| 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. | |
| Lisinopril | LICENSED lisinopril 5mg/5ml oral solution (sugar- free) available | Tablets can be dispersed in water | UNLICENSED liquids available in various strengths | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| Lofepramine | LICENSED 70mg/5ml suspension SF available. | Tablets are NOT suitable for crushing | | | |
| • | | | | | |

L

| 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 | Known Supplier |
|-------------------------|---|--|--|--|--|
| Loperamide | 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. | Available from various ULM providers including; Rosemont (store in fridge): 500mcg/5ml oral solution , 1mg/5ml oral solution- Aclardian Specials - 1mg/5ml oral solution, suspension, 500mcg/5ml oral solution, suspension Rokshaw Laboratories: 1mg/5ml - oral suspension 0.5mg/5ml - oral suspension |
| L-Orthinine-L-Aspartate | Available as Hepa-Merz Granulat 3000 granules sachets (Imported (Germany)) | | | | Available from various ULM providers including Clinigen AAH Aclardian Ethigen |
| Losartan | Licensed tablets available in various strengths. | Crush tablets and disperse in water. | Unlicensed liquid specials available | | Available from various ULM providers including 1. Aclardian Specials 2 Rokshaw Laboratories |

| 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 | Known Supplier |
|---|--|--|--|---|--|
| 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 Mg2*) tablets are a gluten free alternative to licensed 4mmmol 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). Please note liquid preparations, other than Magnaspartate are classed as food stuffs. | Arjun - Magnaphate® 4mmol tabs. Aclardian Clinigen- magnesium glycerophosphate tablets |
| 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 Mg2*) 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). | Available from various ULM providers including; 1. Special Products Ltd 2. Oxford Pharmacy Store (5mmol/5ml) 3. Aclardian Specials 4. Rokshaw Laboratories |
| 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 | | Available from various ULM providers including; Rokshaw Laboratories |
| 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. NB Some tablets are licensed to be crushed to ease administration. 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 (some tablets ar licensed to be crushed) is not an option or is unsuitable (see SCA). NHSGGC paediatrics note- usually do not use liquid | |

| 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 | Known Supplier |
|----------|---|---|--|----------|---|
| Menadiol | | Tablets can be crushed and mixed with water or food. See NEWT guidelines for further information. | Unlicensed 5mg/5ml oral suspension available | | Available from various ULM providers including; 1. Aclardian Specials |

| 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 | Known Supplier |
|------------------------|---|--|---|--|---|
| Mepacrine | | | | Note - GPs are recommended to discuss advice to patients and ongoing blood monitoring arrangements with hospital specialist prior to prescribing this medicine. | Available from various ULM providers including; 1. Aclardian 2. Rokshaw Laboratories 3. Oxford Pharmacy Store (OPS) |
| 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 are scored with a halve line. Must be prescribed by brand Xaqua. | Tablets can be crushed and mixed with water | 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 | | Available from various ULM providers including; 1. Rosemont 2. Aclardian Specials 3. Rokshaw Laboratories |
| Metronidazole | LICENSED suspension (200mg/5ml), suppositories available. | | Unlikely to need: licensed products available | See NEWT guidelines for more information. | |

| 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 | Known Supplier |
|--|--|---|--|--|----------------|
| Mexiletine | LICENSED * Namuscula 200mg (167mg) capsules available Other licensed preparations 50mg, 100mg and 200mg are currently out of stock with an expected recovery of end of 2023 *Please note Namuscula is an Orphan drug and licensed for treatment of myotonia. | The capsules can be opened, and the contents dispersed in water for administration. | | | |
| Miconazole 1% eye drops preservative free | | | | 28 day shelf life once opened - store at room temp | |

| 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 | Known Supplier |
|--|---|---|--|---|---|
| Midazolam (oromucosal vial and buccal pre-filled syringe) | Epistatus® (midazolam) oromucosal solution and oromucosal solution pre-filled syringes LICENSED Epistatus® (10mg/ml) oromucosal pre-filled syringes available in 2.5mg/0.25ml, 5mg/0.75ml and 10mg/1ml strengths. Epistatus® 10mg/ml multi-dose bottle (5ml) preparation is unlicensed. Please note that pre-filled syringes cannot be used to give part doses, there are no integrations on the syringe. Buccal midazolam should be prescribed by brand name to ensure the correct product and strength is supplied. A change in product could have an adverse effect on patient safety as dosage, volume, administration and training will differ between products. | | | Epistatus® 10mg/1ml , 2.5mg/0.25ml, 5mg/0.5ml and 7.5mg/0.75ml pre-filled syringe are licensed products, and not included in the Scottish Drug Tariff. Epistatus® 10mg/ml 5ml vial is an unlicensed product. | 1. Buccolam® (10MG/2ML)-Licensed preparations 2. Epistatus® (10MG/1ML) - Veriton. Available via Alliance and Oxford Pharmacy Stores (OPS) |
| Midazolam (liquid) | | | Unlicensed 1mg/ml liquid available | | PSS |
| Midodrine | LICENSED midodrine 2.5mg, 5mg and 10mg 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 quidelines. | Unlicensed oral suspension available | Note - restricted to specialist initiation in GGC Formulary. | Available from various ULM providers including; Rokshaw Laboratories |

N

| 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 | Known Supplier |
|------------|---|--|--|---|--|
| 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 | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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. | Liquid Available from various ULM providers including; Aclardian Specials - 5mg/5ml solution, suspension PSS- various strengths available Rokshaw Laboratories |
| | | | | UNLICENSED naltrexone capsules available. Note - restricted to specialist initiation in GGC Formulary. | Capsules Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| Naproxen | LICENSED 25mg/ml & 50mg/ml oral suspension & effervescent tablets 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). Amlodipine LICENSED oral solution also available | Unlicensed Special oral suspension and drops available | Note NHSGGC paediatrics - usually use 20mg/ml drops available via Clinigen | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |

N

| 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 | Known Supplier |
|----------------|---|---|--|----------|---|
| Nitrazepam | LICENSED 2.5mg/5ml oral suspension available. Alternatively, consider switching to temazepam (LICENSED liquid available) | | Unlicensed Special 5mg/5ml suspension available | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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 | | |
| Nystatin | LICENSED liquid formulation available | | Unlikely to need: licensed product available | | |

0

| 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 | Known Supplier |
|------------|--|---|---|---|--|
| Olanzapine | LICENSED orodispersible tablets available. | Refer to NEWT for administration guidance | Unlicensed Special oral liquid available | Note - restricted to specialist initiation in NHSGGC Formulary. | Available from various ULM providers including; 1. Aclardian Specials |
| 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 NHSGGC 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. | Aclardian Specials - Aclomep powder for oral solution |
| Oxybutynin | | 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 | |

Р

| 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 | Known Supplier |
|-----------------------------------|---|---|--|--|---|
| Papaverine Injection | | | Various strengths available | | Available from various ULM providers including; 1.PSS 2. Oxford Pharmacy Store (OPS) 3.Torbay - 60mg/2ml |
| Paravit® | | Crush tablets and mix with water. Give | 250mg/5ml Unlicensed liquid special | Note - restricted to specialist initiation in NHSGGC | Available from wholesalers |
| Penicillamine | | immediately. | available | 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 | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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. | Available from various ULM providers including; Aclardian Specials 50mg/5ml solution, suspension Rokshaw Laboratories - suspension (AF) Rosemont - 50mg/5ml oral solution |
| Phenytoin | LICENSED preparations available (liquid 30mg/5ml 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. | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |

Р

| 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 | Known Supplier |
|--|--|---|--|--|--|
| Phytomenadione | oral use in children and neonates, and the oral licence 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 | , | Unlicensed phytomenadione tablets available from various ULM providers including; 1. Oxford Pharmacy Stores (OPS) 2. Aclardian Specials 3. Rokshaw Laboratories |
| Pilocarpine HCI eye drops 0.5% P/F | LICENSED Minims® Pilocarpine Nitrate 2% eye drops available (20x0.5ml) | | | Note - restricted to specialist initiation in NHSGGC Formulary. | |
| Pirenzepine | оторъ ачанале (2000.5нн) | | 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. | Available from various ULM providers including; 1. Oxford Pharmacy Store (OPS) 2. Rokshaw Laboratories |
| 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. | | Available from various ULM providers including; 1. Oxford Pharmacy Store (OPS) 2. Aclardian |
| Pravastatin | Consider LICENSED simvastatin liquid or LICENSED atorvastatin chewable tablets | Crush tablets and mix with water. Give immediately. | Unlicensed liquid special preparations available | | Available from various ULM providers including 1. Rokshaw Laboratories |
| Prednisolone sodium Phosphate Eye Drops P/F | LICENSED 0.5% unit dose available (Minims® Prednisolone Sodium Phosphate) | | Unlicensed specials available | Note - restricted to specialist initiation in NHSGGC Formulary. | Available from various ULM providers including; Torbay (1%) Rokshaw Laboratories |
| 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 NHSGGC Formulary. In the treatment of epilepsy, recommended to maintain on a specific manufacturer's product. Care is needed when switching between different preparations. | Available from various ULM providers including; 1. Rokshaw Laboratories 2. Aclardian |

Р

| 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 | Known Supplier |
|------------------------|---|---|--|---|--|
| 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. | Available from various ULM providers including; 1. Aclardian Specials 2. Rosemont 3. Rokshaw Laboratories |
| Probenecid | | | Unlicensed tablets can be crushed and dispersed in water | | Available from various ULM providers including; 1. Aclardian Specials 2. Oxford Pharmacy Store (OPS) |
| 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. | Available from various ULM providers including; 1. Aclardian Specials |
| Pyridoxine HCI | | Crush tablets and mix with water. | Unlicensed liquid special products available in various strengths | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw |
| Pyrimethamine | | Crush tablets and mix with water or juice. | 2mg/ml liquid unlicensed special product available | | |

Q

| 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 | Known Supplier |
|------------|---|---|--|---|---|
| Quetiapine | Licensed liquid 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 | now available: Liquid special suspensions | 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 NHSGGC Formulary. NB: there may be opportunity to optimise to more cost-effective dose | Available from various ULM providers including; Aclardian Specials: 12.5mg/5ml (150ml), 25mg/5ml (150ml), 50mg/5ml (150ml) Rokshaw Laboratories: 12.5mg/5ml (150ml), 25mg/5ml (150ml), 50mg/5ml (150ml), 25mg/5ml (150ml), 20mg/5ml - £110.00 (150ml) |

P

| 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 | Known Supplier |
|--|--|---|--|--|--|
| 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, suspension included in Part 7S of the Scottish Drug Tariff | Available from various ULM providers including; Rosemont Rokshaw Laboratories Aclardian |
| Restasis [®] Ophthalmic Emulsion 0.05% (ciclosporin) | | | | Note - Ciclosporin for dermatology or rheumatology restricted to specialist initiation in NHSGGC Formulary. | Available from various ULM providers including; 1. Oxford Pharmacy Stores (OPS) 2.Aclardian |
| 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. | Capsules and m/r tablets available from wholesalers as OTC product Liquid: 1. Aclardian Specials 2. Rokshaw |
| Rivaroxaban | available as a LICENSED product. Xarelto brand | 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/ | |

| 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 | Known Supplier |
|---|--|--|--|---|---|
| Selenium | LICENSED - 100mcg/2ml, 500mcg/10ml unit dose amps/vials | | Unlicensed tablets available (SelenoPrecise® 200mcg and 100mcg tablets). | | Available from various ULM providers including; 1. Oxford Pharmacy Store (OPS) 2. Pharma Nord |
| Sertraline | LICENSED - 100mg/5ml concentrate for oral solution SF *** See comments | 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. | | NHSGGC mental health DO NOT support use of the concentated solution and advise crushing ot tablets is preferred option | |
| Sildenafil | 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*). | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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 | Available from various ULM providers including; 1. Aclardian Specials 2. Oxford Pharmacy Stores (OPS) 3. Rokshaw Laboratories |
| 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). | Available from various ULM providers including; 1. PSS 2. Oxford Pharmacy Store (OPS) 3. Aclardian Specials |
| Sodium Bicarbonate Tablets | LICENSED 500mg capsules available | | | Sodium Bicarbonate Tablets 600mg included in Part 7U of Scottish Drug Tariff | Various wholesalers |

SCOTTISH DRUG TARIFF PART 7M, 7S, 7U June 2023

| 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 | Known Supplier |
|---|--|---|--|---|---|
| Sodium Bicarbonate Oral Solution 8.4% | LICENSED 84mg/ml oral solution available (equivalent to 1mmol/ml sodium). | | | Note - restricted to specialist initiation in GGC Formulary. | Various wholesalers |
| 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. | Licensed 1mmol/ml (292.5mg/ml) available from mainline wholesalers. Other strengths available via ULM providers |
| 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 (20x0.0.5ml)) Part 3 SDT - Appliances | | | | Available from various wholesalers |
| 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) | PSS |
| Sodium Chloride Eye Ointment 5% | Sodium Chloride 5% ointment (5g preservative free tube Part 3 SDT - Appliances | | | | Aclardian Specials Oxford Pharmacy Store (OPS) |
| Sodium Cromoglicate 2% Eye Drops Preservative Free | Licensed Catacrom® unit dose eye-drops available | | | | Available via wholesalers |
| 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 | Available via wholesalers |

s

S

| 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 | Known Supplier |
|----------------|---|---|---|---|---|
| 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. | Available from various ULM providers including; Rokshaw Laboratories |
| 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. | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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 | Available from various ULM providers including; Aclardian Specials Rokshaw Laboratories Rosement |
| Sucralfate | LICENSED 1g/5ml oral suspension available via wholesalers. | | UNLICENSED 1g tablets available | | Liquid available from wholesalers Tablets available from various ULM providers including; 1. Alium 2. Aclardian 3. Oxford Pharmacy Stores (OPS) |
| Sulfapyridine | | No information available in NEWT | UNLICENSED 250mg capsules available | | Clinigen |

Т

| 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 | Known Supplier |
|---------------|--|---|--|--|---|
| 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 NHSGGC Formulary. Tacrolimus preparations should be prescribed by brand name. Increased monitoring recommended if changing brands. | Available from various ULM providers including; Aclardian Specials Rosemont (Tacrose*)2.5mg/5ml 5mg/5ml PharmaNord Rokshaw Laboratories The Specials Laboratory |
| 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 | | | Available from various ULM suppliers including; Aclardrian |
| Terbinafine | | Crush tablets and mix with water | Unlicensed oral suspension available | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| Tetrabenazine | | Crush tablets and mix with water. | Unlicensed liquid specials available | Note - restricted to specialist initiation in NHSGGC Formulary. | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |

Т

| 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 | Known Supplier |
|---------------------------|--|--|--|---|---|
| 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. | | | |
| 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 | | | Available from various ULM providers including; Clinigen |
| Tizanidine | | Crush tablets and mix with water. | 2mg/5ml SF liquid specials available | Note - restricted to specialist initiation in NHSGGC Formulary. | Available from various ULM providers including; 1. Aclardian Specials |
| 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 | | Available from various ULM providers including; 1. Aclardian Specials 2. Rokshaw Laboratories |
| 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, suspension included in Part 7S of Scottish Drug Tariff | 1. Oxford Pharmacy Store: 5% mouthwash £23.50 - £27.97 (100ml) 2. Aclardian Specials: 500mg/5ml oral solution (100ml), 500mg/5ml oral suspension (100ml) 250mg/5ml oral suspension - £31.82 (60ml) 5% mouthwash £41.72 (100ml) 3. Rosemont 500mg/ml solution (100ml) 4. Nova Laboratories Ltd - 12 week expiry 5. Rokshaw Laboratories: - mouthwash 5% £40.20 (100ml), £46.00 (200ml) 6.The Specials Laboratory |
| 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 | | | |
| Trientine Dihydrochloride | LICENSED tablets/capsules available | Not listed in NEWT guidelines | | | |

Т

| 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 | Known Supplier |
|---------------------|--|--|--|----------------|
| Trihexyphenidyl HCL | LICENSED liquid formulation 5mg/5ml oral syrup | 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

| 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 | | Known Supplier |
|---|--|--|--|--|----------------------|
| Urea Oint 25% | Consider Flexitol® / Dermatonics heel balm (Urea 25% balm) | | | | Rokshaw Laboratories |
| 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

| 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 | Known Supplier |
|------------|---|--|--|--|---|
| Warfarin | | 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. | Available from various ULM providers including; |
| Zopiclone | Consider switching to temazepam (available as LICENSED liquid). | Tablets UNSUITABLE for crushing or dissolving | Liquid unlicensed special available. | | Available from various ULM providers including; 1. Aclardian Specials 2.Rokshaw Laboratories |

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 authoristion. 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 | |
| Aclardian Specials | 01954 213490 | info@aclardian.com |
| Alliance Healthcare Coatbridge | 0344 8544 998 | |
| Alium Medical | 020 8238 6770 | enquiries@aliummedical.com |
| Arjun | 0800 015 7806 | info@arjunproducts.co.uk |
| BCM Specials | 0333 032 9301 | specials.bcm@fareva.com |
| Clinigen Group PLC | 01932 824100 | 01932 824300 ukcustomerservice@clinigengroup.com |
| Durbin PLC | 020 8869 6501 | OnDemand@DurbinGlobal.com |
| Eaststone | 0800 678 3102 | 0800 678 3101 |
| Ennogen | 01322 629220 | claire@ennogen.com info@ennogen.com |
| Ethigen | 01355 598154 | inio e chi logon.com |
| 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 | 020 3312 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 WEP Clinical | 01268 535200 0208 0048185 | Whole.sale@waymade.co.uk |

| Colecalciferol strength and | Brand name and manufacturer | Pack size |
|---|---|-----------|
| formulation | InVita D3* 400unit capsules (Consilient Health | 28 |
| 400unit capsules | Ltd) Colecalciferol 400 unit capsules (Alissa | 30 |
| | Healthcare Research Ltd.) Colecalciferol 800 unit capsules SCOTTISH | |
| | DRUG TARIFF PART 7 | 30 |
| | Desunin® 800unit tablets (Mylan) Desunin® 800unit tablets (Mylan) | 30 90 |
| | Fultium-D3® 800unit capsules (Thornton & Ross | 30 |
| | Ltd) Fultium-D3® 800unit capsules (Thornton & Ross | 90 |
| 300unit capsules/tablets | 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 |
| ,000unit tablets/capsules | Colecalciferol 1000 unit capsules (Colonis Pharma Ltd) | 30 |
| 1,000uriit tablets/capsules | Colecalciferol 1000 unit capsules (Alissa Healthcare Research Ltd) | 30 |
| | Colecalciferol 1000 unit capsules (Consilient | 30 |
| 2,400units/ml oral drops SF (400 | Health) InVita D3® 2,400units/ml oral drops (Consilient | |
| units/ 6 drops) 2,740units/ml oral drops SF (200 | Health Ltd) Fultium-D3® 2,740units/ml oral drops (Thornton & | 10ml |
| units/3 drops) | Ross Ltd) | 25ml |
| | Strivit-D3® 3,2000unit capsules (Strides Pharma UK Ltd) | 30 |
| 3,200unit capsules * | Fultium-D3® 3,200unit capsules (Thornton & Ross Ltd) | 30 |
| | Fultium-D3® 3,200unit capsules (Thornton & Ross Ltd) | 90 |
| 1,000unit tablets | Desunin® 4,000unit tablets (Mylan) | 70 |
| 5,600unit capsules | InVita D3® 5,600unit capsules (Consilient Health Ltd) | 4 |
| 0,000units/ml oral drops SF | Thorens® 10,000units/ml oral drops (Galen Ltd) 10 ml | 10ml |
| 200 units/drop) | Thorens® 25,000units/2.5ml oral solution (Galen Ltd) | 4x2.5ml |
| | Thorens® 25,000units/2.5ml oral solution (Galen Ltd) | 2.5ml |
| 0,000 unit tablets/capsules | Colecalciferol 10,000 unit capsules (Alissa Healthcare Research Ltd) | 20 |
| Colecalciferol strength and formulation | Brand name and manufacturer | Pack siz |
| 5,000units/5ml oral solution | Colecalciferol 3,000units/ml oral solution (Thame | 100ml |
| | Laboratories Ltd) Colecalciferol 20,000 unit capsules | 20 |
| | SCOTTISH DRUG TARIFF PART 7 Strivit-D3* 20,000unit capsules (Strides Pharma | 30 |
| | UK Ltd) Strivit-D3* 20,000unit capsules (Strides Pharma | 10 |
| 00 000 000 | UK Ltd) Colecalciferol 20,000unit softgel capsules (Tor | 20 |
| 20,000unit capsules | Generics Ltd) Fultium-D3® 20,000unit capsules (Thornton & | 20 |
| | Ross Ltd) Fultium-D3® 20,000unit capsules (Thornton & | 15 |
| | Ross Ltd) Plenachol® 20,000unit capsules (Accord | 30 |
| | Healthcare Ltd) | 10 |
| | Stexerol-D3® 25,000unit tablets (Kyowa Kirin Ltd) | 12 |
| 25,000unit tablets /capsules | Thorens® 25,000 unit capsules Thorens® 25,000 unit capsules | 3 12 |
| | InVita D3*25,000unit capsules (Consilient Health Ltd) | 3 |
| 25,000units/1ml oral solution unit | InVita D3* 25,000units/1ml oral solution (Consilient Health Ltd) | 3 |
| 10,000unit capsules | Plenachol® 40,000unit capsules (Accord Healthcare Ltd) | 10 |
| 50,000unit capsules | InVita D3® 50,000unit capsules (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 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 | 25,000 unit solid formulation – Thorens 25,000 unit caps are most cost effective SOC,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, Inverciyde HSCP.

FOR NHS GGC PRESCRIBING TEAM INTERNAL USE ONLY

A **GGC DERMATOLOGY SPECIALS SCOTTISH DRUG TARIFF PART 7M,7S, 7U June 2023

| 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 | Known Supplier |
|--|---|---|--|--|-------------------------|
| **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 | 1. PSS - 6 month expiry |
| **Cade Oil 6%, Salicylic Acid 3% & Sulphur 3% in Emulsifying Ointment | | | | Various preparations and sizes available | 1. PSS - 6 month expiry |
| **Coal Tar in WSP | | | | Various preparations | The Specials |
| **Coal Tar in YSP | | | | and sizes available Coal Tar Solution 2% in YSP, 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%) | | | | 1. PSS |

FOR NHS GGC PRESCRIBING INTERNAL USE ONLY

| **Coal Tar 2% with Salicylic Acid 2% in Emulsifying Ointment | | | 1. PSS |
|--|--|---|---|
| **Coal tar soln 5% Betameth Val. 0.025% Oint | | licensed proprietary preparations e.g. use licensed strengths of topical steroids. | 1. Oxford Pharmacy Store 2. Aclardian Specials 3. Rokshaw Laboratories 4. The Specials Laboratory |
| **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 | 1. Aclardian 2. PSS |

FOR NHS GGC PRESCRIBING INTERNAL USE ONLY

| **Ichthammol 1% and Zinc Oxide 15% in YSP (Special Ointment No1) | | | Available from various ULM providers including; PSS Huddersfield - 500g (1 year expiry) Rokshaw Laboratories - (200g), (500g) Aclardian Specials (200g) The Specials Laboratory |
|---|--|---|---|
| **Ichthammol 10% Ointment | | | 1.PSS - 1 year shelf life |
| **Ichthammol 1% in Calamine Liniment | | | |
| **Lassar's Paste | | | 1. Huddersfield |
| **Menthol in Aqueous Cream | | | Arjun via wholesalers |
| **Reflective (Dundee) Sunscreens - various shades | | Reflectant Sun Screen (Beige, Coffee, Coral Pink) included in Part 7S of Scottish Drug Tariff | providers |

| **Salicylic Acid in Aqueous Cream | | Special Order products | 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. | £22.00 -£26.05 (100g) |
|--|--|------------------------|---|--|
| **Salicylic Acid 2% and Sulphur 2% in Aqueous Cream | | | | Available from various ULM providers including 1. Aclardian Specials 2. Rokshaw Laboratories |
| **Salicylic Acid in Emulsifying Ointment | | | Salicylic Acid 5%, 10% in Emulsifying Ointment included in Part 7S of Scottish Drug Tariff | Available from various ULM providers including Rokshaw Laboratories |

FOR NHS GGC PRESCRIBING INTERNAL USE ONLY

| **Salicylic Acid in Yellow Soft Paraffin | Saliyclic Acid 5%,10% in Yellow soft paraffin, included in Part 7S of Scottish Drug Tariff Available from various ULM providers including PSS Rokshaw Laboratories: |
|--|--|
| **Special Ointment No 1 | See Ichthammol 1% in Zinc Oxide 15% in Yellow Soft Paraffin |
| **Trichloroacetic Acid Paste | PSS |
| **Urea in White Soft Paraffin | |