Medicines safety initiative launched by NHS Highland

A new medicines safety initiative is being launched by NHS Highland in June. It aims to improve patients’ awareness of medicines that should be temporarily stopped during vomiting/diarrhoea/fever.

The “medicines sick day rules” cards are based on existing guidance provided in the NHS Highland Polypharmacy Guideline. They list five groups of medicines that should be stopped if a patient develops an illness that can lead to dehydration. The medicines are:

- Diuretics: can cause dehydration or make dehydration more likely in an ill patient.
- ACE inhibitors and angiotension II receptor blockers: in a dehydrated patient, these medicines may impair kidney function which could lead to kidney failure.
- NSAIDs: when given to a dehydrated patient, these medicines may impair kidney function and this could result in kidney failure.
- Metformin: dehydration increases the risk of lactic acidosis, a serious and potentially life-threatening side effect of metformin.

The medicines sick day rules cards will be primarily distributed through community pharmacies and dispensing GPs to patients receiving one of these medicines on a repeat prescription. Cards will also be sent to GP practices and hospitals so that prescribers can give a card to a patient when initiating one of these medicines.

Cards will be sent to pharmacies, GP practices and hospitals in late June. For further information, contact: Clare Morrison, Lead Pharmacist (North), by email: clare.morrison2@nhs.net.

Concerns raised over abuse potential of pregabalin and gabapentin

Concerns about the abuse potential of pregabalin and gabapentin have been growing locally over the past two to three years. The local drug related deaths group has noted that 20% of drug related deaths have involved pregabalin or gabapentin, and one death was caused directly by illicit IV use of gabapentin.

The FRANK website recognises the abuse potential of these drugs can cause relaxation, calmness and euphoria, as well as enhance the effects of other drugs such as opiates. The Erowid website/database (which allows users to report on their drug using experiences) includes comments varying from “it helps with opiate withdrawal” and “social lubricant and increased motivation” to “mellow happy and sociable – ask your GP”. The abuse potential has also been recognised internationally.

Dr David Gordon, Consultant Psychiatrist at New Craigs Hospital, says that incidents have generally, but not always, happened in patients with a known history of substance abuse and are often taken to potentiate the effects of other drugs, such as opiates. Symptoms are described as euphoric and calming. He advises prescribers to:

- Be aware that these drugs are not first line treatments for either generalised anxiety disorder or peripheral neuropathy.
- Be aware of the risk of abuse and addiction to pregabalin and gabapentin even in those with no history of substance abuse.
- Consider the street value of these drugs and be careful of requests for increased doses and quantities, and also for early repeat and lost prescription requests.

In this issue of the Pink One

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About the Pink One

The Pink One is published by NHS Highland Pharmacy Services. It is circulated to all GPs, hospital medical staff, pharmacists in primary and secondary care, nurse prescribers, charge nurses and to local service managers and directorate managers for onward dissemination to other nursing staff. Views expressed are those of one or more of the editors/contributors.

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Atrial fibrillation: change in guidance for aspirin

Aspirin is no longer recommended for stroke prevention in low risk patients with atrial fibrillation. Instead, the new guidance is:

• In patients with a CHADS2VASc of 0, the risk of stroke is lower than the risks of taking either aspirin or warfarin.

• In patients with CHADS2VASc of 1 or more, warfarin has a lower risk of drug related complications and is better at preventing stroke than aspirin.

The change in guidance is based on a new recognition that the efficacy of aspirin in preventing stroke is weak. In addition, aspirin offers no benefit over warfarin in terms of its potential for harm, since the risk of major bleeding (and intracranial haemorrhage) with aspirin is not significantly different to that with oral anticoagulants, especially in older people.

This advice is reflected in new SIGN guidance, and current European Society of Cardiology and Royal College of Physicians of Edinburgh guidelines. Local guidance in the Highland Formulary on embolism prophylaxis for patients with non-valvular, persistent or permanent atrial fibrillation has been updated accordingly.

Further advice comes from NHS Highland Cardiologist Dr Peter Clarkson: “We all see patients who refuse to go on oral anticoagulants and, in those patients, aspirin prescription may be reasonable. The ESC guidelines state that when patients refuse the use of any oral anticoagulants, antiplatelet therapy should be considered using a combination of aspirin plus clopidogrel or, less effectively, aspirin alone.” This is also advised by SIGN.

Reminder of citalopram QT contraindications

A recent incident in NHS Highland has indicated a need to remind prescribers that citalopram is contraindicated with drugs that prolong the QT interval.

Citalopram is associated with dose-dependent QT interval prolongation. Because citalopram may have an additive effect, co-administration of citalopram with other medicines that prolong the QT interval is contraindicated. Lists of drugs associated with QT prolongation are available at www.QTDrugs.org. For citalopram and escitalopram, note that:

• Co-administration with antibiotics including erythromycin, clarithromycin and ciprofloxacin is contraindicated.

• A dose reduction may be required with commonly prescribed drugs such as omeprazole which can raise the plasma levels of citalopram.

The Highland Formulary now recommends fluoxetine and sertraline as first choice antidepressants. Because fluoxetine has a number of cytochrome P450 interactions, sertraline is a better choice for patients with co-morbidities. Patients should not normally be started on citalopram.

The incident involved co-prescription of citalopram with fingolimod and led to symptomatic cardiac arrhythmias.

New learning support tools as Yellow Card reports fall

New learning support tools have been launched in order to address a significant reduction in the number of Yellow Card reports made in Scotland.

Yellow Card reports are essential in detecting adverse drug reactions and interactions. Between 2009 and 2011, the total number of yellow card reports made in Scotland dropped by 9% while across the UK the figure increased by 3%.

Yellow Card Centre Scotland and NHS Education Scotland (NES) have produced six e-learning modules on adverse drug reactions to be launched this summer. They aim to increase awareness of the harm that can be caused by medicines and how these problems can be identified or avoided. In addition, BMJ Learning and the MHRA has launched a new learning module on pharmacovigilance.

... and for amiodarone

Amiodarone is an antiarrhythmic which is often used for paroxysmal atrial fibrillation (AF) when other agents have been ineffective.

Unfortunately, amiodarone is associated with a range of minor and serious side effects including thyroid dysfunction (~10%), corneal micro-deposits (~90%), photo sensitivity (<75%) and lung disease (<7%). Therefore, it is good practice to limit the use of amiodarone and to use alternative safer treatments such as bisoprolol where possible.

Some patients who have paroxysmal AF will, over time, develop permanent AF. At this point, amiodarone can be substituted for safer rate control medications such as a beta-blocker, a calcium channel blocker or digoxin.

NHS Highland Cardiologist Professor Stephen Leslie recommends that all patients currently treated with amiodarone should be reviewed to ensure that its use is still appropriate, seeking advice from Cardiology if necessary. Where appropriate, switching to a safer treatment should be considered.

Medicines Safety news in brief

Pharmacy interventions valued

Community pharmacists in NHS Highland may have prevented an estimated 156 severe or potentially life-threatening incidents in 2012 by querying prescriptions. The estimate is based on a large practice-based audit in England. It found community pharmacists queried an average of 2.22 of every 1,000 prescription items. Most related to dosage instructions, and inaccurate quantities and strength. However, 1.5% of these could have resulted in severe harm or death if they had not been queried.

GMC prescribing guidance

New guidance from the General Medical Council on good practice in prescribing and managing medicines and devices was produced in February. It clarifies doctors’ responsibilities for writing prescriptions; and for the decisions and actions taken when supplying, administering or instructing others to administer/supply medicines. Failure to follow the guidance could put GMC registration at risk.
Reducing total antibiotic prescribing is the focus of a new national target across Scotland.

Last month, priorities for the next two years on healthcare associated infection and antimicrobial resistance were set out by the Chief Medical Officer and Chief Nursing Officer. These include a new Level 3 indicator within the Quality Outcomes Framework to reduce total antibiotic prescribing. Guidance produced by the Scottish Antimicrobial Prescribing Group explains: “National data shows that in 2011 the use of systemic antibiotics in primary care was 3.4% higher than in 2010, following a decreasing trend in the period 2008-2010. SAPG believe that introduction of this new national target as a level 3 indicator will provide an additional stimulus to improve the quality of antibiotic use in primary care by reducing unnecessary prescribing for self-limiting upper respiratory tract infections.”

NHS Highland tends to prescribe fewer antibiotics than the Scottish average. However, a spike in use was observed in Highland in the first three months of 2013 which was not observed elsewhere (see chart). Therefore prescribers are asked to ensure that all antibiotic prescribing is appropriate.

**PPIs: don’t forget Clostridium difficile risk**

Prescribers across NHS Highland are beginning to heed advice to reduce the use of gastric acid suppressing drugs because of the increased risk of *Clostridium difficile* infection.

The risk of *Clostridium difficile* infection with proton pump inhibitors (PPIs) is now well known, with evidence suggesting that a dose response relationship exists so that the risk of infection rises as the level of acid suppression increases. Therefore, the advice for prescribers is summarised in the box below, right.

In order to reduce use of PPIs in hospitals, a task group chaired by Consultant Gastroenterologist Dr Lindsay Potts has taken the following actions:

- Highland Formulary: change in guidance to make ranitidine first line for reflux, indigestion and gastroprophylaxis (see Pink One numbers 100 and 101).
- Acute pain service: guidance developed on use of NSAIDs in acute pain and requirement for associated gastroprophylaxis.
- Surgery: new surgical ward guidance on acid suppression therapy for stress ulcer prophylaxis.
- Orthopaedics: encouragement of review of PPI requirement in selected post-operative elective hip/knee surgery patients on discharge whose NSAIDs have been discontinued.
- Medical: guidance developed on review of patients on PPIs.

Latest Raigmore hospital drug use data show evidence of reduced PPI use and increased ranitidine use.

**Prescribing antibiotics for frail elderly patients**

Prescribing antibiotics for frail elderly patients in care homes carries a particularly high level of risk. This is because of the burden of co-morbidities, risk of drug interactions and changes in drug handling.

Therefore, the Scottish Antimicrobial Prescribing Group has produced advice on issues to consider when prescribing antibiotics to this vulnerable group. Many of the recommendations have been incorporated into the Highland Management of Infection guidance.

Antibiotic use increases with age in Scotland and is highest for patients in care homes. This is particularly significant in NHS Highland where prescribing rates for care home patients are higher than the Scottish average.
“Highland Formulary 5th edition”
The latest review cycle of the Highland Formulary is now complete and the 5th edition eFormulary is now available on the NHS Highland Intranet and website. It is also available as an App for iPhone, iPad and iPod and the paper copy will be printed and distributed this summer to those on the Formulary distribution list.

Dapaglifozin and linagliptin
Two new oral antidiabetic drugs have been added to the Formulary:
• Dapaglifozin lowers plasma glucose by inhibiting the renal re-absorption of glucose in the proximal tubule, thereby promoting its excretion.
• Linagliptin is a DPP-4 inhibitor which has the advantage that no dosage reduction is required in patients with any degree of renal impairment.

Guidance on the use of both drugs is included in updated Formulary guidance “Achieving control in type 2 diabetes”.

Mirabegron in overactive bladder
Mirabegron is the first beta-3 adrenoceptor agonist to treat symptoms of overactive bladder. It offers an alternative where anticholinergics are either not tolerated or are ineffective.

Blood glucose monitoring
Guidance on blood glucose monitoring has been updated. and advice includes:
• Who should monitor blood glucose and how often.
• Selection and provision of blood glucose monitoring meters, test strips and lancets.
• Disposal of sharps.

Aspirin post-CABG
Consensus and evidence on the aspirin dose and duration post-CABG is lacking. Current advice is that following CABG surgery aspirin 300mg daily is given initially reducing at a variable interval to 75mg to 150mg daily as defined by the surgeon; if clopidogrel is given concomitantly, only aspirin 75mg daily is given.

Alcohol detoxification guidance
Hospital guidelines for the administration of Pabrinex and thiamine in alcohol detoxification have been updated. All alcohol dependent individuals requiring detoxification should be offered parenteral Pabrinex with the choice of route being dependent on the setting. High dose oral thiamine should be prescribed along with the Pabrinex.

Rotavirus vaccine
Rotavirus vaccine live attenuated (Rotarix) will be used in the rotavirus immunisation programme which will be introduced into the routine childhood immunisation programme from 1 July 2013 for infants aged 2 and 3 months.

Diprobath discontinued
Diprobath bath additive has been discontinued. Formulary alternatives are Ollatum Emollient Bath Additive and Balmun Bath Oil. In addition Aveeno Bath Oil is prescribable for ACBS specified conditions. If an added antimicrobial action is required then Emulsiderm is recommended.

Minor Ailments Service Formulary
The NHS Highland Community Pharmacy Minor Ailments Service Formulary 5th Edition is now available. The medicines listed in this Formulary are “over the counter” medicines and their use is endorsed within the Highland Formulary. The Community Pharmacy Minor Ailments Service provides NHS management of common clinical conditions and is one of the four core pharmaceutical care services in the Community Pharmacy contract.

List of changes to the Highland Formulary agreed in May 2013

The full cumulative list of changes to the Highland Formulary 4th edition is provided in the e-Pink One document, available on NHS Highland Intranet and website.

Chapters/sections reviewed
Section 2.8 Oral anticoagulants
Section 4.10 Alcohol dependence
Chapter 5 Infection

Guidance reviewed
‘Oral coumarin anticoagulant advice’
‘Hospital guidelines for administration of Pabrinex/thiamine in alcohol detoxification’
‘Diazepam scoring sheet’
‘Adult parenteral gentamicin (GGC): prescribing and monitoring chart’
‘Flow diagram for initiating intravenous vancomycin pulsed infusion in adult patients’
‘Management of infection’ Introduction’
‘Acute otitis media’ (in children)
‘Achieving control in type 2 diabetes’

Addition of medicines
Chapter 5 Infections
Darunavir oral suspension 500mg/5mL
Voriconazole intravenous infusion 200mg

Chapter 6 Endocrine system
Humalog Mix 50 10mL vial
Humalog Mix 25 10mL vial
Novorapid 10mL vial
Linagliptin tablets 5mg
Dapaglifozin tablets 5mg, 10mg
Precision Xceed Pro blood glucose test strips, blood ketone test strips
Aviva blood glucose test strips
Glucomen LX Sensors blood glucose test strips
Glucome LX Ketone blood ketone test strips

Chapter 7 Obstetrics, gynaecology and urinary-tract disorders

Deletion of medicines
Chapter 2 Cardiovascular system
Glycerol trinitrate m/r tablets 2mg, 3mg, 5mg

Chapter 6 Endocrine
Optiunc Plus blood glucose test strips

Chapter 13 Skin
Diprobath bath additive

Mirabegron m/r tablets 25mg, 50mg

Chapter 9 Nutrition and blood
Thiamine tablets 100mg

Chapter 11 Eye
Aflibercept intravitreal injection 40mg/mL

14 Immunological products and vaccines
Rotavirus vaccine live attenuated (Rotarix)

www.nhshighland.scot.nhs.uk/Clinical/Formulary/Pages/Default.aspx
Cumulative 4th edition chapters/sections reviewed
Chapter 1 Gastro-intestinal system
Chapter 2 Cardiovascular system
Chapter 3 Respiratory system
Chapter 4 except section 4.8, 4.9
Chapter 5 Infections
Chapter 6 Endocrine
Chapter 7 Obstetrics, gynaecology and urinary-tract disorders
Chapter 8 Malignant disease
Chapter 9 Nutrition and blood
Chapter 10 Musculoskeletal and joint disease
Chapter 11 Eye
Chapter 12 Ear, nose & nasopharynx
Chapter 13 Skin
Chapter 14 Immunological products and vaccines
Chapter 15 Anaesthesia
Appendix 1 Therapeutic drug monitoring summary
Appendix 2 Good prescription writing guidelines
Appendix 3 Emergency treatment of poisoning
Appendix 4 Summary of NHS Highland Minor Ailments Service Formulary
Appendix 5 Polypharmacy: summary of guidance for prescribing in frail adults

Cumulative 4th edition guidance reviewed
Chapter 1 Gastro-intestinal system
‘Reflux’
‘Indigestion’
‘Monitoring of drugs used in inflammatory bowel disease’
‘NHS Highland Stoma accessories Formulary’

Chapter 2 Cardiovascular system
‘Step up management of essential hypertension’
‘Step up management of hypertension in patients with diabetes’
‘Stable angina management guideline’
‘Embolism prophylaxis for patients with persistent or permanent atrial fibrillation’
‘Protocol for acute treatment of ischaemic stroke (day 1-14 post-ischaemic stroke)’
‘Protocol for secondary prevention post TIA or ischaemic stroke (starting 2 weeks post-ischaemic stroke or immediately post TIA)’
‘Anticoagulant switching’
‘Drug use in secondary prevention following myocardial infarction’
‘Use of lipid-lowering medication in the prevention of atherosclerosis’
‘Embolism prophylaxis for patients with non-valvular, persistent or permanent atrial fibrillation’

Chapter 3 Respiratory system
‘Oral coumarin anticoagulant advice’
‘Chapter 3 Respiratory system’
‘Guide to inhaler devices’
‘Chapter 4 Central nervous system’

Chapter 4 Central nervous system
‘Anxiety spectrum disorders’
‘Protocol guidance for the treatment of generalised anxiety disorder’
‘Antipsychotics - relative side-effects’
‘Schedule for physical monitoring for people with bipolar disorder’
‘Antidepressant guidance’
‘Antidepressant selection’
‘Advice on antidepressant switching from New Craggs Pharmacy’
‘Orlistat or weight management in obesity’
‘Acute pain - adult oral and rectal analgesic step ladder’
‘Fentanyl patches’
‘Smoking cessation interventions’
‘Alternative methods of administration for Parkinson’s disease medicines’
‘Parkinsons disease guideline’
‘Management of primary (idiopathic) restless legs syndrome (RLS)’ (new)
‘Hospital guidelines for administration of Paprinex/thiamine in alcohol detoxification’
‘Diazepam scoring sheet’

Chapter 5 Infection
‘Management of Infection guidance’
‘Adult parenteral gentamicin (GGC): prescribing and monitoring chart’
‘Flow-diagram for initiating intravenous vancomycin pulsed infusion in adult patients’

Chapter 6 Endocrine system
‘Highland Formulary Insulins’
‘Pioglitazone prescribing algorithm’
‘Protocol for use of glucagon-like peptide (GLP-1) analogues’
‘Hormone replacement therapy guidelines’
‘NHS Highland Cancer Centre guidelines for use of bisphosphonates’
‘Achieving control in type 2 diabetes’
‘Guideline for blood glucose monitoring’

Chapter 7 Obstetrics, gynaecology and urinary-tract disorders
‘Missed combined oral contraceptive pills’
‘Emergency contraception’
‘Catheter patency solutions for long-term indwelling urinary catheters’

Chapter 8 Malignant disease and immunosuppression
‘Strategy for the use of adjuvant aromatase inhibitors (AI) and tamoxifen’

Chapter 9 Nutrition and blood
‘Total parenteral nutrition regimes’
‘Nutritional sip-feed flowchart and screening tool’
‘Gluten-free foods’
‘Hospital guidelines for administration of Paprinex/thiamine in alcohol detoxification’

Chapter 10 Musculoskeletal and joint disease
‘Non-steroidal anti-inflammatory drugs’

Chapter 13 Skin
‘Adverse reactions to topical therapy’
‘Use of emollients’
‘Incontinence dermatitis’
‘Management of pruritus’
‘Use of topical corticosteroids’
‘Management of eczema/dermatitis’
‘Management of psoriasis’
‘Management of acne’
‘Management of chronic urticaria and angioedema’

Chapter 14 Immunological products and vaccines
‘Guidance on prescribing vaccines and medicines for travel’

Chapter 15 Anaesthesia
‘Local anaesthetic toxicity’

Additions
Chapter 1 Gastrointestinal system
‘Macrogol oral powder, compound 6-563 grams/sachet (Movicol-Half)’
‘Mesalazine (Pentasa) m/r tablets 1 gram’
‘Bisacodyl tablets 5mg’
‘Omeprazole intravenous infusion 40mg Co-phenotrope tablets 2.5/0.025’
‘Pentasa retention enema 1 gram/100mL’

Chapter 2 Cardiovascular system
‘Ticagrelor tablets 90mg’
‘Pentoxifylline m/r tablets 400mg’
‘Danaparoid injection 750 microgram/0.6mL’
‘Dabigatran capsules 110mg, 150mg’
‘Rivaroxaban tablets 15mg, 20mg’
‘Bivalirudin injection 250mg’
‘Alteplase injection 10mg (5·8 million units), 20mg (11·6 million units)’
‘Digoxin Immune Fab (DigiFab) powder for solution for infusion 40mg/vial’

Chapter 3 Respiratory system
‘Flutiform (formoterol fumarate dihydrate/ fluticasone propionate) metered dose inhaler 5 micrograms/50 micrograms, 5 micrograms/125 micrograms, 10 micrograms/250 micrograms’

Chapter 4 Central nervous system
‘Oxycodone m/r tablets (Oxycontin) 15mg, 30mg, 60mg, 120mg’
Duloxetine capsules 30mg, 60mg
Nicotine oromucosal spray 1mg/spray
Levetrazetam concentrate for intravenous infusion 500mg/5mL
Botulinum toxin type A 50 unit vial (Botox), 300 unit vial (Dysport)
Nicotine lozenges, sugar-free 1mg
Fentanyl nasal spray (PecFent) 100 micrograms/metered spray, 400 micrograms/metered spray
Pethidine injection 50mg/1mL
Methylphenidate (Medikinet XL) m/r capsules 5mg
Metoclopramide m/r capsules 15mg
Pregabalin oral solution 100mg/5mL
Nicotine inhalator 15mg/cartidge
Paliperidone injection 50mg, 75mg, 100mg, 150mg
Mempantil tablets 5mg, 10mg, 15mg, 20mg; oral solution 5mg/actuation (10mg/mL)
Tapentadol m/r tablets 50mg, 100mg, 150mg, 200mg, 250mg
Oxazepam tablets 10mg
Nortriptyline tablets 10mg, 25mg
Lacosamide tablets 50mg, 100mg, 150mg, 200mg
Roglitone transdermal patches 1mg/24hrs, 2mg/24hrs, 3mg/24hrs, 4mg/24hrs, 6mg/24hrs
Chapter 5 Infections
Linezolid oral suspension 100mg/5mL
Fidaxomicin tablets 200mg
Anidulafungin intravenous infusion 100mg
Efavirenz capsules 50mg, 100mg, 200mg
Boceprevir capsules 200mg
Telaprevir tablets 375mg
Posaconazole (Noxafil) oral suspension 200mg/5mL
Levofoxacin tablets 250mg, 500mg; intravenous infusion 500mg/100mL
Nevirapine m/r tablets 400mg
Oxelamivir oral suspension 30mg/5mL
Tobramycin nebuliser solution 300mg/4mL
Darunavir tablets 800mg
Darunavir oral suspension 500mg/5mL
Voriconazole intravenous infusion 200mg
Chapter 6 Endocrine system
Testosterone undeconate injection 1gram/4mL
Apirida injection 100 units/mL 10mL vial
Apirida injection 100 units/mL 3mL cartridge for ClikSTAR device
Lanust injection 100 units/mL 3mL cartridge for ClikSTAR device
Novorapid injection 100 units/mL 3mL disposable FlexTouch device
Exenatide prolonged release suspension for injection 2mg/vial
Sitagliptin tablets 25mg, 50mg
Glucose injection 20%
Colecalciferol (Fultium D3) capsules 800 units (equiv to 20 micrograms vitamin D3)
Ibandronic acid (Bondronat) concentrate for solution for infusion 2mg/2mL, 6mg/6mL
Dexemethasone injection 3-3mg/1mL, 6mg/2mL
Colecalciferol tablets 800 units
Humalog Mix 50 10mL vial
Humalog Mix 25 10mL vial
Novorapid 10mL vial
Linagliptin tablets 5mg
Dapagliflozin tablets 5mg, 10mg
Precision Xceed Pro blood glucose test strips, blood ketone test strips
Aiviva blood glucose test strips
Glucomen LX Sensors blood glucose test strips
Glucomen LX Ketone blood ketone test strips
Chapter 7 Obstetrics, gynaecology and urinary-tract disorders
Rigvedion tablets (ethinylestradiol 30 micrograms/levonorgestrel 150 micrograms)
Estradiol (Vagifem) vaginal tablets 10 micrograms
Estriol intravaginal cream 0-1%
Garedel 20/150 tablets
TriRegol tablets 30/75 tablets
Garedel 30/150 tablets
Diclofenac (Voltarol) injection 75mg/3mL
Alprostadil double chamber cartridge 40 micrograms
Alprostadil urethral application (MUSE) 125 micrograms
Mirabegron m/r tablets 25mg, 50mg
Chapter 8 Malignant disease and immunosuppression
Bendamustine injection 25mg, 100mg
Pazopanib tablets 200mg, 400mg
Dacarbazine injection 500mg
Nilotinib capsules 150mg
Azacitidine injection 100mg
Degarelix injection 80mg, 120mg
Myophenolic acid e/c tablets (Myfortic) 180mg, 360mg
Tacrolimus m/r capsules 3mg (Advagraf)
Amsacrine injection 5mg/mL
Dasatinib tablets 80mg, 100mg, 140mg
Docetaxel 20mg/mL
Myophenolate mofetil oral suspension 1 gram/5mL, intravenous infusion 500mg
Mercaptopurine oral suspension 100mg/5mL
Fingolimod capsules 500 micrograms
Abraterolne tablets 250mg
Chapter 9 Nutrition and blood
Iron isomaltoside 1000 (Monofer) injection 100mg/1mL, 200mg/2mL, 500mg/5mL, 1 gram/10mL
Iron dextran injection 100mg/2mL
Digoxin-specific antibody fragments (Digibind) injection 38mg
Pranopranol injection 1mg/1mL
Lepirudin injection 50mg
Drotrecogin alfa (Xigris) injection 40mg/ mL
Chapter 10 Musculoskeletal and joint disease
Cortizolubam injection 200mg
Fexubosat tablets 80mg, 120mg
Eteracet prefillled syringe 25mg
Collagenase injection 900 micrograms
Chapter 11 Eye
Collagenase injection 900 micrograms
Etanercept prefilled syringe 25mg
Febuxostat tablets 80mg, 120mg
Certolizumab injection 200mg
Chapter 12 Ear, nose and oropharynx
GlucoMen LX Ketone blood ketone test strips
Aflibercept intravitreal injection 40mg/mL
Chapter 12 Ear, nose and oropharynx
Saliveze oral spray
Xerolin oral spray
Chapter 13 Skin
Urea cream 25% (Dermatonics Heel Balm)
Metromidazole gel 0-75% (Anabact)
Dermol 500 lotion
Oxaline Plus emollient bath additive
Balneum Plus cream
Calcipotriol ointment
Hydrocortisone butyrate (Locoid) lipocream 0-1%
Dovobet gel
Efflornithine (Vaniqa) cream 11-5%
Miconazole nitrate spray powder 0-16%
Chapter 14 Immunological products and vaccines
Normal immunoglobulin solution for intravenous infusion 100mg/mL (Octagam), solution for subcutaneous injection 200mg/mL (Hizentra)
Meningococcal A, C, W135 and Y conjugate (Nimenrix)
Rotarix, live attenuated (Rotarix)
Chapter 15 Anaesthesia
Mivacurium injection 10mg/5mL, 20mg/10mL
Sugammadex injection 500mg/5mL
Appendix 3 Emergency treatment of poisoning
Potassium iodate tablets 85mg
Methionine tablets 500mg
Phentolamine injection 10mg/1mL
Charcoal, activated (activated charcoal) granules 50g (Carbomix)
Digoxin Immune Fab (DigiFab) powder for solution for infusion 40mg vial
Deletions
Chapter 1 Gastrointestinal
Phenol oily injection 5%
Chapter 2 Cardiovascular system
Digoxin-specific antibody fragments (Digibind) injection 38mg
Propranolol injection 1mg/1mL
Lepirudin injection 50mg
Drotrecogin alfa (Xigris) injection 5mg, 20mg
Ezetimibe tablets 10mg
Esmolol infusion 2-5 grams in 250mL
Isosorbide mononitrate m/r tablets 25mg, 50mg
Isosorbide mononitrate m/r capsules 60mg
Digoxin-specific antibody fragments (Digibind) injection 38mg
Dobutamine injection 250mL/20mL amps
Glyceryl trinitrate tablets
Chapter 3 Respiratory system
Tiotorolium solution for inhalation (Spiriva Respimat) 2 5 micrograms per metered inhalation
Chapter 4 Central nervous system
Pethidine tablets 50mg, injection 50mg/1mL, 100mg/2mL
Nicotine inhalator 10mg/cartridge
Chapter 5 Infections
Sodium fusidate infusion 500mg
Nitrofurantoin tablets 50mg
Promazine tablets 25mg; oral solution 25mg/5mL
Nicotine transdermal patch 5mg/16hrs
Oseltamivir oral suspension 60mg/5mL
Tobramycin nebuliser solution 300mg/5mL (Tobi)
Darunavir tablets 400mg

Chapter 6 Endocrine system
Protirelin injection 200 micrograms/2mL
Estriadiol implants 25mg, 50mg
Testosterone injection 100mg/2mL (Viromone)
Apidra injection 100 units/mL 3mL cartridge for OptiSet device
Apidra injection 100 units/mL 3mL cartridge for OptiClik pen device
Lantus injection 100 units/mL 3mL cartridge for OptiSet device
Lantus injection 100 units/mL 3mL cartridge for OptiClik pen device
Glimperide tablets 1mg, 2mg, 3mg, 4mg
Glucose injection 50%
Ibandronic acid (Bonviva) tablets 150mg; injection 3mg/3mL
Raloxifene tablets 60mg
Optium Plus blood glucose test strips

Chapter 7 Obstetrics, gynaecology and urinary-tract disorders
Mercilon tablets
Logynon tablets
Femodene tablets
Marvelon tablets
Microgynon 30 tablets
Alprostadil urethral application (MUSE) double chamber cartridge 40 micrograms
Alprostadil urethral application (MUSE) 125 micrograms
Diclofenac (Dyloject) injection 75mg/2mL
Oxybutynin elixir 2·5mg/5mL
Estradiol (Vagifem) vaginal tablets 25 micrograms

Chapter 8 Malignant disease and immunosuppression
Docetaxel 40mg/mL
Amsacrine 75mg
Dasatinib tablets 70mg
Docetaxel 10mg/mL

Chapter 9 Nutrition and blood
Iron dextran (Cosmofer) injection 100mg/2mL
Clinutren dessert 125g
Calcium effervescent tablets 400mg (10mmol) calcium/tablet (Sandocal-400)

Chapter 10 Musculoskeletal and joint disease
Indometacin capsules 25mg, 50mg, m/r capsules 75mg, suppositories 100mg
Nabumetone tablets 500mg
Prednisolone e/c tablets 2·5mg, 5mg
Certolizumab pegol injection 200mg

Chapter 11 Eye
Timolol single use eye drops 0·25%, 0·5%

Chapter 12 Ear, nose and oropharynx
Amphotericin lozenges 10mg
AS Saliva Orthana oral spray

Chapter 13 Skin
Metronidazole gel 0·8% (Metrotop)
Benzoyl peroxide alcoholic gel 5% (PanOxyl)
Aqueous cream
Alphosyl HC cream
Calcipotriol (Dovonex) scalp solution
Tretinoin 0·025% gel
Trichloroacetic acid solution 20%
Benzoyl peroxide alcoholic gel 10%
Benzoyl peroxide aqueous gel 2·5%, 10%
Diproba bath additive

Chapter 14 Immunological products and vaccines
Monovalent influenza A(H1N1) vaccine (Celvapan)
Monovalent influenza A(H1N1) vaccine (Pandemrix)

Chapter 15 Anaesthesia
Halothane
Sugammadex injection 200mg/2mL
Suxamethonium prefilled syringe 100mg/2mL

Appendix 1 Appendix 3 Emergency treatment of poisoning
Methyliothioninium chloride (methylen blue) injection 1%
Methionine tablets 250mg
Digoxin specific antibody fragments (Digibind) injection 38mg