

Index

Note: Page numbers in *italic* and **bold** refer to figures and tables, respectively.

- acarbose, **151**
- ACE inhibitors, 5, 29, 86
- aciclovir, **8**
- acitretin, 30
- activated charcoal, 49, 50
- Actrapid, **69**, 137, 153
- acute coronary syndrome (ACS), 53–54, 125
- Addison's disease, **73**
- adenosine, 55, 56
- adrenal crisis, **73**, 131, 200
- adrenaline, 157
- advance care plan, 24
- airway management, 62
- albumin, low, 87, **165**
- alcohol, warfarin interactions, **117**
- alcohol withdrawal syndrome, 37, 39–41
- alendronate, 177
- allopurinol, **8**, 177
- alteplase, 66
- amikacin, **8**, 169
- aminoglycosides, 5, 86
- aminophylline, 64, 166
- amiodarone, 56, **117**, 178
- amoxicillin, 27, 175
- amphotericin, **8**
- anaesthetics, local, 102
- anakinra, **8**
- analgesia, 27, 91–97
 - acute coronary syndrome, 53
 - analgesic ladder, *91*, 133
 - breastfeeding, 33
 - compound analgesics, 95
 - epidural, 101–3
 - neurosurgery, **58**, 60
 - patient controlled, 99–100
 - postoperative, 133
 - safety reminders, 95
- antiasthmatics, 27, 32
- antibiotic prophylaxis, 134, 187–89
- antibiotics
 - breastfeeding and, 31, 32
 - choice of, 181
 - renal disease and, 5
 - treatment, 182–87
 - warfarin interactions, **117**
- anticoagulants, 28, 46, 77. *See also* warfarin
 - clinic, 126
 - direct oral. *See* direct oral
 - anticoagulants (DOACs)
 - parenteral, 119–22
 - post thrombolysis, 66
 - pulmonary embolism, 65
 - surgery and, **121**, 130
- anticonvulsants, 28–29
 - breastfeeding and, 33
 - neurosurgery, 60
 - surgery and, 131
- antidepressants, 29, 33
- antiemetics, 28, 49
 - palliative care, 109, 110
 - postoperative, 134
 - prophylaxis, 96
- antiepileptics, 28, 41
- antifungals, 29
- antihistamines, 32, 172
- antihypertensives, 29
- antiplatelets, 53, 77, 126, 130
- antipsychotics, 37
- Antley–Bixler syndrome, 29
- apixaban, **8**, 123, **124**, 127
- ARBs, 5, 29
- arrhythmias, 55–56
- aspirin, 28, 53, 95
 - asthma and, 173
 - surgery and, 130
 - warfarin interactions, 117, 172
- asthma, 55, 63–64, 172, 173
- atrial fibrillation (AF), 115, 123, **124**
- avanafil, **9**
- azathioprine, **9**, 177
- bacterial endocarditis, 186
- beclometasone, 27
- benzodiazepines, 29, 36, 37, 40, 105, 106

- benzylpenicillin, **9**
 beta-blockers, 29, 53, 56, **71**
 breastfeeding, 32
 contraindications, 172
 biguanides, **151**
 bisoprolol, **9**, 53, **71**
 bleeding, risk factors for, 122
 blood glucose, 44, 45, 47, 88, 137, 153
 blood pressure control, 57
 bowel preparation, 145–47
 bradycardia, 102
 brand-only prescribing, 196
 breastfeeding, 31–33
 drug classification and, 32
 drugs to avoid, 33
 drugs using caution, 33
 safe drugs, 32
 British National Formulary (BNF), 1, 26, 171
 Appendix 1, 176
 Lugol's solution, 71
 British Society of Gastroenterology
 guidelines, bowel preparation, 145
 British Thoracic Society guidelines,
 1, 62, 64
 bronchoconstriction, 62–64
 bronchodilators, 62, 63
 bulk-forming laxatives, 82
 bupivacaine, 102

 calcium, **72**
 interactions, 177, 178
 calcium chloride, **69**, **72**
 calcium gluconate, **69**, **72**
 calcium resonium, **69**
 carbamazepine, 28, 33, 41, **170**, 177, 179
 cardiology, 53–56
 cardioversion, 55, 56
 cariprazine, **9**
 carvedilol, 85
 catheter migration, 102
 cefotaxime, **9**
 ceftazidime, **9**
 ceftriaxone, **9**, 182
 cefuroxime, **9**
 cellulitis, 185
 cephalosporins, 27, 172
 cerebral bleeding, 59
 children, 17–20
 administration routes, 19
 adverse drug reaction
 reporting, 20
 age group definitions, 17
 medication adherence, 19, 20
 medication errors, 18, 20
 prescribing principles, 17
 unlicensed drugs, 18
 chloral hydrate, **9**
 chlorthalidopoxide, 40, **40**, 41
 chronic renal failure (CRF), 6–15
 ciclosporin, 175, 177, 179
 ciprofloxacin, **9**, 27, 85, 175, 178, 180
 clarithromycin, **10**
 cleft lip/palate, 27, 28, 30
 clinical decision support (CDS), 195
 clopidogrel, 53, 130
Clostridium difficile, 185
 clotrimazole, 29
 CO₂ retention, 61
 co-amoxiclav, **10**
 Cockcroft and Gault equation, 7, 125
 co-codamol, **10**, **95**
 co-danthramer, 33
 codeine, 33, 60, 92, **94**, 133
 conversion table, **96**
 codeine phosphate, 76, **95**
 co-dydramol, **10**, **95**
 cognitive impairment, 22
 colchicine, **10**
 colostomy, 135
 community acquired infections, 186
 compound analgesics, 95
 constipation, 81–82, 133
 opioid induced, 109
 COPD (chronic obstructive pulmonary
 disease), 62, 63
 corticosteroids, 32, 63, 199–200
 management of therapy, 199
 withdrawal of, 200
 co-trimoxazole, **10**
 COX-2 inhibitors, 6, 171
 creatinine clearance (CrCl), 7, 125
 crystalloid, 58
 cyclizine, 28, **83**, 84, 111
 CYP 3A/450, **12**

 dabigatran, **10**, 123, **124**, 125, **127**
 dalteparin, 66, **119**, **121**
 dapagliflozin, **10**
 delirium, 22, 35–38
 assessment of, 36
 causes of, 35
 drug treatment, 36

- initial management, 36
- prognosis, 38
- delirium tremens, 36, 39–41
- dementia, 22, 35
- deprescribing, 23, 191–93
- Deprivation of Liberty Safeguards (DoLS), 22
- dexamethasone, 59, 179
- diabetes, 149–53
 - renal impairment and, 5
 - type 1, 138–39
 - type 2, 45, 139, 142, 149
- diabetes in surgery, 137–43
 - postoperative management, 141
- diabetic ketoacidosis (DKA), 43–44, 45, 138, 141
 - avoidance tips, 44
 - prescribing tips, 43
- diamorphine, 53, 54, **96**, 110, 111
- diarrhoea, 76
- diazepam, 41, 105, 106
- diclofenac, 27, **93**, 95, 179
- digoxin, 56, **71**
 - drug interactions, 178
 - drug monitoring, 163–64
- dihydrocodeine, 27, **94**, 95, **96**
- diltiazem, 178
- diphenhydramine, 30
- direct oral anticoagulants (DOACs), 65, 123–28
 - advice to patients, 128
 - contraindications, 125
 - dosing, **124**
 - drug interactions, 126
 - indications for, 123
 - monitoring, 125
 - reversal, 59, 126
 - surgery and, 130
- discharge letters, 192
- doxycycline, 27, 178
- DPP-4 inhibitors, **140**, **152**
- drug calculations, 155–57
- drug hypersensitivities/
 - contraindications, 171–73
- drug interactions, 116, 126, 175–80
- duodenal ulcers, **76**
- dural puncture headache, 102
- DVT
 - prevention, 120
 - treatment, **119**
 - warfarin therapy, **115**
- dyspepsia, 75
- edoxaban, **11**, 123, **124**, **127**
- eGFR (estimated glomerular filtration rate), 22
- electrolyte abnormalities, 88
- electrolyte emergencies, 67–73
- electronic prescribing, 1, 62, 195–98
 - omitting doses, 198
 - transfer between systems, 197
- enalapril, 26
- end of life care plan, 24
- endoscopy, 77
- enoxaparin, 66, **119**, **121**
- enteric absorption, 129
- enzyme induction, 175, **176**
- enzyme inhibition, 175, **176**
- epidural abscess, 102
- epidural analgesia, 101–103
 - complications, 102
 - contraindications, 101
 - prescribing, 103
- epidural haematoma, 102
- epilepsy, 25, 105, 107
- erythromycin, 177, 179, 180
- esmolol, **71**
- extravasation, 202
- fentanyl, 97, 101, 109
- fetal antiepileptic syndrome, 28
- fetal warfarin syndrome, 28
- fixed-rate insulin infusion (FRII), 44, 153
- flecainide, 56
- fluconazole, 29, 180
- fluid therapy, 43, 45, 58
 - electrolyte imbalances from, 67
 - surgery and, 132
- folic acid, 28
- furosemide, 54, 85, 178
- gabapentin, **11**
- ganciclovir, **11**
- gastric ulcers, 76
- gastroenteritis, 184
- gastroenterology, 75–79, **188**
- gastro-oesophageal reflux, **75**
- generic medications, 196
- gentamicin, 86, 160–63
- GLP-1 agonists, **140**
- glucagon, 48
- glucose, 44, 45, 47, 48
 - blood glucose, 41, 45, 47, 88, 137, 153
 - replacement, **73**
- granisetron, **83**, 110

- haloperidol, 37, **83**, 84, 109, 111
 heparin, 28, 33, 46, 77. *See also* LMWHs
 (low molecular weight heparins)
 contraindication, 59
 unfractionated, 66
 warfarin combination, 113
 hospital acquired infections, 186
 hydralazine, 29
 hydrocortisone, 63, **71**, **73**, 77, 179, 199
 hydromorphone, **96**
 hydroxyurea, **12**
 hyoscine hydrobromide, 111
 hypercalcaemia, 70
 hypercapnia, 61
 hyperglycaemia, 88, 138, 141
 hyperkalaemia, 68
 hyperosmolar hyperglycaemic state
 (HHS), 45–46
 hypoglycaemia, 47–48, **73**, 142
 mild-to-moderate, 47
 severe, 48
 hypokalaemia, **164**
 hypotension, 102
 hypothyroidism, **73**, **164**
 hypovolaemia, 146
 hypoxaemia, 61–62

 ibuprofen, 27, 92, **93**
 idarucizumab, 126
 ileostomy, 135
 imipenem, **12**
 infections, 181–89
 inflammatory bowel disease, 77
 infusion administration, 157
 INRs, 114
 range, 103
 target, 65, 114, **115**
 very high, 115
 insulin, 44, 45, **69**
 discontinuing, 142
 fixed-rate infusion, 44, 153
 intravenous, 153–54
 long-acting, **138**, **150**
 pump, **138**, 143
 rapid acting, **150**
 short-acting, **138**, 139, **150**
 type 2 diabetes, **141**
 types, 149
 variable-rate infusion, 44, 139, 142,
 153

 intracranial pressure (ICP), 57
 intravenous insulin, 153–54
 intravenous therapy, 201–3
 indications for, 201
 problems with, 202
 speed of administration, 202
 ipratropium bromide, 62, 63
 isotretinoin, 30

 JBDS (Joint British Diabetes Societies)
 guidelines, 43
 jejunostomy, 134

 labetalol, 29, 32
 lactulose, 29, 33, 59, **69**, 82, 86, 109
 lansoprazole, **75**
 laxatives, 29, 33, 81–82, 96, 109
 bowel preparation, **147**
 levetiracetam, 60, 107
 levomepromazine, 84, 110, 111
 levothyroxine, **73**
 liothyronine sodium, **73**
 lithium, 30, 33
 drug interactions, 179
 drug monitoring, **170**
 renal disease and, 5
 liver disease, 85–86, 88
 drug contraindications, 172
 LMWHs (low molecular weight
 heparins), 65, 66, 119
 patients unsuitable for, 120
 prophylaxis, 103
 red alert, 119
 treatment, **119**, **121**
 local anaesthetics, 102
 loperamide, 76
 lorazepam, 37, 40, 41, 105
 lower respiratory tract infections, 183
 Lugol's solution, 71

 magnesium, **72**
 magnesium sulfate, 63
 malnutrition, 87
 mannitol, 59
 medication dictionaries, 195
 Medicines Information Centre, 171, 176
 meningitis, 181
 Mental Capacity Act, 22
 Mental Health Act, 22
 meropenem, **12**

- metabolic emergencies, 67–73
 metformin, **12**, **140**, 173
 methadone, 27, 179
 methimazole, **71**
 methotrexate, 26
 methyl dopa, **12**, 29
 methylprednisolone, 59
 metoclopramide, 53, 54, **83**, 84, 111, 173
 metoprolol, 56
 MHRA
 codeine, 33
 paediatric medicines, 20
 safety advice, 92
 sodium valproate, 28
 midazolam, 106, 111
 mirabegron, **12**
 misoprostol, 29
 morphine, **12**, 27, 33, **58**
 breakthrough dose, 110
 contraindications, 172
 conversion to diamorphine, 110
 dose calculations, 155
 morphine sulfate, **96**, 97
 MRSA, 187, 188
 multidrug resistant Gram-negative bacteria, 187

 N-acetylcysteine (NAC), 49, 50
 NaCl, 43, 45, 67, 70
 naloxegol, 82
 naloxone, 96
 naproxen, 92
 nasogastric feeds, 179
 nausea, 83–84, 109, 110
 postoperative, 133
 nebulisation, 62
 necrotising fasciitis, 185
 neurosurgery, 57–60
 mannitol and, 59
 steroids and, 59
 neutropenic sepsis, 187
 NICE guidelines, 1
 asthma, 64
 fluid regimen, 132
 insulin, 44
 laxatives, 82
 nil-by-mouth, 129, 153
 nimodipine, 58
 nitrate infusion, 54
 norfloxacin, 178

 NovoRapid, 137, 139
 NSAIDs, 27, 91
 breastfeeding, 32
 contraindications, 86, 171
 doses, efficacy and side effects, **93**
 drug interactions, 179
 postoperative, 133
 red alert, 95
 renal disease and, 6
 safety advice, 92
 warfarin interactions, **117**
 NSTEMI, 54

 obesity, 160
 ofloxacin, 178
 olanzapine, 37
 older patients, 21–24
 cognitive impairment, 22
 drug monitoring, 163
 frailty, 21
 medication adherence, 22, 23
 organ function decline, 22
 polypharmacy, 23
 special considerations, 21
 warfarin dosages, 112
 omeprazole, 29, 75
 ondansetron, 28, **83**, 110
 opioids, 54, 60, 92, 95. *See also* morphine
 conversion table, **96**
 doses, efficacy and side effects, **94**
 epidural analgesia, 101
 palliative care, 109
 patient controlled analgesia, 99
 postoperative, 133
 prescribing tips, 96
 toxicity, 109
 orthopaedic surgery, **121**, 125
 osmotic laxatives, 82
 oxycodone, **13**, **96**
 oxygen therapy, 54, 61, 62
 oxytetracycline, 27, 178

 Pabrinex, 41, 89
 palliative care, 109–11
 pamidronate, **70**
 paracetamol, 27, **58**, 91, 133
 compound analgesics, 95
 doses, efficacy and side effects, **93**
 red alert, 95

- paracetamol overdose, 49–51
 decreasing absorption, 49
 liver unit transfer, 50
 metabolic manipulation, 49
 parenteral anticoagulation, 119–22
 parenteral nutrition, 87–89
 paroxetine, 30
 pathology data, 197
 patient controlled analgesia (PCA), 99–100
 patient information leaflets, 19, 23
 peak level, 160
 penicillamine, 173
 penicillin, 27, 172, 173
 percentages, 156
 pethidine, 26
 pharmacodynamic interactions, 176
 pharmacokinetic interactions, 175
 phenobarbital, 28, **170**
 phenytoin, 28, 60, 107–8
 drug interactions, 175, 177, 179
 drug monitoring, **165**
 phlebitis, 202
 polypharmacy, 23
 potassium, 44, 46, 68, **72**
 PPIs, 75
 preconfigured selection, drugs, 196
 prednisolone, 27, 30, 32, 63, 77
 conversion to, 199, 200
 drug interactions, 179
 surgery and, **131**
 pregabalin, **13**
 pregnancy, 25–30
 common medications, 27–30
 fetal risks, 26
 first trimester, 26
 forms of administration, 26
 maternal benefits, 25
 pre-embryonic period, 26
 second/third trimesters, 26
 treatment of infections, 186
 weighing the risks, 25
 probenecid, 175
 prochlorperazine, 28
 promethazine, 28
 propranolol, 41, **71**, 85
 propylthiouracil, **71**
 pulmonary embolism, 65–66
 treatment, **119**
 warfarin therapy, **114**
 pulmonary oedema, 54–55
 radiocontrast agents, 5
 ranitidine, 29
 ratios, 156
 rebleeding, 59
 rehydration, **70**
 renal clearance, 22
 renal disease, 5–15, 22
 avoiding drug toxicity, 6
 metformin, 173
 NSAIDs and, 171
 respiratory emergencies, 61–64
 rifampicin, 114, 175, 179
 rifaxamin, 85
 rivaroxaban, **13**, 123, **124**, **127**
 safe drug use, 1–4
 salbutamol, 27, 62, 63, 64, **69**
 seizures, 105–8
 senna, 29, 33, 82, 96, 109
 septicaemia, 186
 SGLT2 inhibitors, **140**, 152
 SICKLY tips, 2, 3–4, 87, 146, 176
 simvastatin, 175, 179
 sodium, **72**
 sodium docusate, 109
 sodium iodide, **71**
 sodium valproate, 28, 33, 107, **170**
 sotalol, **13**, 56
 spasm, 58
 spina bifida, 26
 spironolactone, 85
 splenectomy prophylaxis, 134
 SSRIs, 29, 33
 STEMI, 54
 steroids, 63. *See also* corticosteroids
 neurosurgery and, 59
 surgery and, 131
 systemic, 27, 30
 stimulant laxatives, 82
 Stockley's Drug Interactions, 176
 stoma, 77, 134
 stool softeners, 59
 streptococcal pharyngitis, 182
 subarachnoid haemorrhage, 57–59
 sulfonylureas, 140, **151**
 supraventricular tachycardia (SVT), 55–56
 surgery, 129–35
 antibiotic prophylaxis, 187–89
 diabetes in, 137–43
 DOACs, 126
 epidural analgesia, 101

- neurosurgery, 57–60
 orthopaedic, **121**, 125
 parenteral anticoagulation, **121**
 patient controlled analgesia, 99
 prophylaxis, 134
 syringe drivers, 111
 systemic steroids, 27, 30
- tacrolimus, 180
 tadalafil, **13**
 temazepam, 30
 terlipressin, 86
 theophylline, 64, 166, 180
 therapeutic drug monitoring (TDM),
 159–70, 197
 reasons for, 159
 results indicating, 160
 timing of, 159
 thiamine, 41
 thiazolidinediones, **152**
 thrombolysis, 66
 thyroid storm, 70
 thyrotoxic crisis, 70
 ticagrelor, 53
 topical drugs, 26
 tramadol, **94**, 95, **96**, 133
 tranexamic acid, **14**
 transdermal fentanyl, 97, 109
 trimethoprim, **14**, 26, 27
 trough level, 160
 type 1 diabetes, 138–39
 type 2 diabetes, 45, 139, 142, 149
- unlicensed drugs, 18
 upper respiratory tract infection, 182
 urinary tract infection, 185
- vagal manoeuvres, 55, 56
- valaciclovir, **14**
 valganciclovir, **14**
 vancomycin, 168
 variable-rate insulin infusion (VRII), 44,
 139, 153
 discontinuing, 142
 venous thromboembolism (VTE), 122,
 123, **124**
 ventricular tachycardia (VT), 56
 verapamil, 55, 178
 visual hallucinations, 109
 vitamin A, 30
 vitamin B, 41
 vitamin K, 115, 116
 vomiting, 83–84, 110
 postoperative, 133
- warfarin, 65, 66, 113–18
 aspirin interactions, **117**, 172
 contraindications, 28, 59
 disease interaction, 117
 dosage in the elderly, 115
 dose adjustment, 114, 115
 drug interactions, 116, 175, 177
 food interactions, 116
 less speedy anticoagulation, 114
 reversing effects of, 115
 speedy anticoagulation, 113–14
 surgery and, 130
 target INRs, 114, **115**
- Wells score, 65
 Wernicke–Korsakoff syndrome, 41
 World Health Organization (WHO)
 analgesic ladder, 91, 133
- Yellow Card Scheme, 20
- zoledronic acid, **70**