

**MCMMASTER ESSENTIAL/CORE DRUGS LIST FOR MEDICAL STUDENTS***Dr Anne Holbrook, MD, PharmD, MSc, FRCPC on behalf of: Division of Clinical Pharmacology & Toxicology, McMaster University*

<p><b>1. Gastrointestinal system</b></p> <p>1.1 Peptic ulcer disease</p> <ul style="list-style-type: none"> <li>• Antacids</li> <li>• H2-receptor antagonists (e.g. ranitidine)</li> <li>• Proton pump inhibitors (e.g. omeprazole)</li> </ul> <p>1.2 Antidiarrhoeal drugs</p> <ul style="list-style-type: none"> <li>• Antimotility drugs (e.g. codeine, loperamide)</li> </ul> <p>1.3 Laxatives</p> <ul style="list-style-type: none"> <li>• Laxatives (e.g. bran, psyllium, senna, lactulose, PEG)</li> </ul> <p>1.4 Inflammatory bowel disease</p> <ul style="list-style-type: none"> <li>• Aminosalicylates (e.g. mesalazine)</li> <li>• Biologics (e.g. infliximab)</li> </ul>	<p><b>9. Cardiovascular system</b></p> <p>9.1 Diuretics</p> <ul style="list-style-type: none"> <li>• Thiazide diuretics (e.g. hydrochlorthiazide)</li> <li>• Loop diuretics (e.g. furosemide)</li> <li>• Potassium-sparing diuretics (e.g. amiloride, spironolactone)</li> </ul> <p>9.2 <math>\beta</math>-adrenoceptor blocking drugs</p> <ul style="list-style-type: none"> <li>• <math>\beta</math>-adrenoceptor blocking drugs (e.g. metoprolol, bisoprolol)</li> </ul> <p>9.3 Calcium channel blockers</p> <ul style="list-style-type: none"> <li>• Calcium channel blockers (e.g. amlodipine, diltiazem)</li> </ul> <p>9.4 Nitrates</p> <ul style="list-style-type: none"> <li>• Nitroglycerin spray and ointment</li> </ul> <p>9.5 Drugs affecting the renin-angiotensin system</p> <ul style="list-style-type: none"> <li>• ACE inhibitors (e.g. ramipril), Angiotensin II receptor antagonists (e.g. losartan)</li> <li>• Angiotensin receptor-Neprilysin inhibitors</li> </ul> <p>9.6 Anti-arrhythmic drugs</p> <ul style="list-style-type: none"> <li>• Digoxin, Amiodarone</li> </ul> <p>9.7 Anti-platelet drugs</p> <ul style="list-style-type: none"> <li>• Anti-platelet drugs (e.g. aspirin, clopidogrel, ticagrelor)</li> </ul> <p>9.8 Anticoagulants</p> <ul style="list-style-type: none"> <li>• Heparins (unfractionated, low molecular weight)</li> <li>• Oral anticoagulants (e.g. warfarin, DOACs)</li> </ul> <p>9.9 Lipid-lowering drugs</p> <ul style="list-style-type: none"> <li>• Statins (e.g. atorvastatin)</li> </ul>
<p><b>2. Respiratory system</b></p> <p>2.1 Bronchodilators</p> <ul style="list-style-type: none"> <li>• Beta 2-adrenoceptor agonists (e.g. salbutamol, salmeterol)</li> <li>• Antimuscarinics (e.g. tiotropium)</li> <li>• Combinations (e.g. LAMA-LABA, ICS-LABA)</li> <li>• Leukotriene receptor antagonists (e.g. montelukast)</li> </ul> <p>2.2 Anaphylaxis Drugs</p> <ul style="list-style-type: none"> <li>• Epinephrine</li> </ul>	
<p><b>3. Psychiatric disease</b></p> <p>3.1 Anxiolytic and hypnotic drugs</p> <ul style="list-style-type: none"> <li>• Benzodiazepines (e.g. diazepam, temazepam)</li> <li>• Z-drugs (e.g. zopiclone)</li> </ul> <p>3.2 Antidepressant drugs</p> <ul style="list-style-type: none"> <li>• Tricyclic antidepressants (e.g. amitriptyline)</li> <li>• Selective serotonin reuptake inhibitors (e.g. fluoxetine, citalopram)</li> <li>• Other antidepressant drugs (e.g. venlafaxine, bupropion)</li> </ul> <p>3.3 Antipsychotic drugs</p> <ul style="list-style-type: none"> <li>• Antipsychotic drugs (e.g. haloperidol, olanzapine)</li> </ul> <p>3.4 Mood stabilizers</p> <ul style="list-style-type: none"> <li>• Mood stabilizers (e.g. lithium)</li> </ul> <p>3.5 Drugs of abuse</p> <ul style="list-style-type: none"> <li>• Opioids; Cannabis; Amphetamine; Cocaine</li> </ul> <p>3.6 Drugs to Treat Substance Abuse</p> <ul style="list-style-type: none"> <li>• Suboxone, methadone</li> </ul>	<p><b>10. Nervous system</b></p> <p>10.1 Drugs for Parkinson's disease</p> <ul style="list-style-type: none"> <li>• e.g., Levodopa-carbidopa</li> <li>• Other antiparkinsonian drugs (e.g. bromocriptine)</li> </ul> <p>10.2 Drugs used to treat epilepsy</p> <ul style="list-style-type: none"> <li>• Anticonvulsant drugs (e.g. phenytoin, carbamazepine, valproate)</li> </ul> <p>10.3 Drugs used to treat migraine</p> <ul style="list-style-type: none"> <li>• 5-HT1-receptor agonists (e.g. sumatriptan)</li> </ul> <p>10.4 Drugs used for nausea and vomiting</p> <ul style="list-style-type: none"> <li>• Anti-emetic drugs (e.g. prochlorperazine, ondansetron)</li> </ul>
<p><b>4. Endocrine system</b></p> <p>4.1 Drugs for diabetes</p> <ul style="list-style-type: none"> <li>• Insulins</li> <li>• Metformin</li> <li>• Oral hypoglycaemic agents (e.g. sulphonylureas, SGLT-2 inhibitors, dipeptidyl peptidase-4 inhibitors)</li> </ul> <p>4.2 Drugs for Thyroid disease</p> <ul style="list-style-type: none"> <li>• Levothyroxine, propranolol, methimazole</li> </ul> <p>4.3 Drugs for Osteoporosis</p> <ul style="list-style-type: none"> <li>• Bisphosphonates (e.g. alendronate)</li> <li>• Other drugs used in osteoporosis treatment and prophylaxis (e.g. calcium, vitamin D)</li> </ul> <p>4.4 Corticosteroids</p> <ul style="list-style-type: none"> <li>• Hydrocortisone, dexamethasone, prednisone</li> </ul>	<p><b>11. Infectious disease</b></p> <p>11.1 Antibacterial drugs</p> <ul style="list-style-type: none"> <li>• Penicillins (e.g. benzylpenicillin, amoxicillin, Piperillin-tazobactam)</li> <li>• Cephalosporins (e.g. cefuroxime, ceftriaxone)</li> <li>• Other broad spectrum antibiotics (e.g. macrolides, quinolones, co-trimoxazole, meropenem, aminoglycosides (e.g. gentamicin)</li> <li>• Vancomycin</li> <li>• Antituberculous drugs (e.g. isoniazid, rifampicin, ethambutol)</li> </ul> <p>11.2 Antifungal drugs</p> <ul style="list-style-type: none"> <li>• Antifungal drugs (e.g. clotrimazole, amphotericin, nystatin)</li> </ul> <p>11.3 Antiviral drugs</p> <ul style="list-style-type: none"> <li>• Antiviral drugs (e.g. acyclovir)</li> </ul>

<p><b>5. Obstetrics and gynaecology</b></p> <ul style="list-style-type: none"> <li>5.1 Contraception Drugs           <ul style="list-style-type: none"> <li>• Combined oral contraceptives</li> </ul> </li> <li>5.2 Oxytocic drugs           <ul style="list-style-type: none"> <li>• Oxytocic drugs (e.g. prostaglandins, oxytocin)</li> </ul> </li> <li>5.3 Magnesium Sulphate</li> </ul>	<p><b>12. Oncology</b></p> <p><i>12.1 Cancer Chemotherapy</i></p> <ul style="list-style-type: none"> <li>• Alkylating drugs (e.g. cyclophosphamide)</li> <li>• Cytotoxic antibiotics (e.g. doxorubicin)</li> <li>• Anti-estrogens (e.g. tamoxifen)</li> </ul>
<p><b>6. Skin, eyes and ENT</b></p> <p><i>6.1 Drugs for allergic rhinitis</i></p> <ul style="list-style-type: none"> <li>• Antihistamines (e.g. cetirizine, diphenhydramine)</li> </ul> <p><i>6.2 Drugs for the eyes</i></p> <ul style="list-style-type: none"> <li>• Glaucoma drops (eg, timolol, latanoprost)</li> </ul> <p><i>6.3 Drugs for the skin</i></p> <ul style="list-style-type: none"> <li>• Emollients</li> <li>• Topical corticosteroids (e.g. hydrocortisone cream)</li> <li>• Acne (e.g. benzoyl peroxide, topical and systemic retinoids)</li> </ul>	<p><b>13. Locomotor system</b></p> <p><i>13.1 Analgesic drugs</i></p> <ul style="list-style-type: none"> <li>• NSAIDs (e.g. ibuprofen, naproxen)</li> </ul> <p><i>13.2 Disease-modifying anti-rheumatic drugs</i></p> <ul style="list-style-type: none"> <li>• Disease-modifying anti-rheumatic drugs (e.g. methotrexate, hydroxychloroquine, leflunomide)</li> </ul> <p><i>13.3 Drugs for Gout</i></p> <ul style="list-style-type: none"> <li>• Allopurinol</li> </ul>
<p><b>7. Renal and Urological disease</b></p> <p><i>7.1 Immunosuppressant drugs</i></p> <ul style="list-style-type: none"> <li>• Immunosuppressants (e.g. cyclosporin, azathioprine)</li> </ul> <p><i>7.2 Drugs for benign prostatic hypertrophy</i></p> <ul style="list-style-type: none"> <li>• a-adrenoceptor blockers (e.g. doxazosin), finasteride, tamsulosin</li> </ul> <p><i>7.3 Drugs for Prostate Cancer</i></p> <ul style="list-style-type: none"> <li>• gonadorelin analogues (e.g. goserelin)</li> </ul>	<p><b>14. Surgery, anaesthetics and intensive care</b></p> <p><i>14.1 Anaesthetic drugs</i></p> <ul style="list-style-type: none"> <li>• Inhalational anaesthetic drugs (e.g. halothane)</li> <li>• Intravenous anaesthetics (e.g. thiopental sodium, propofol)</li> <li>• Local anaesthetic drugs (e.g. lidocaine)</li> <li>• Muscle relaxants (e.g. succinylcholine, rocuronium)</li> </ul> <p><i>14.2 Analgesic drugs</i></p> <ul style="list-style-type: none"> <li>• Acetaminophen</li> <li>• Opioids (e.g. codeine, oxycodone, morphine)</li> </ul> <p><i>14.3 Resuscitation Drugs</i></p> <ul style="list-style-type: none"> <li>• Norepinephrine, dopamine, atropine</li> </ul>
<p><b>8. Genitourinary disease</b></p> <p><i>8.1 Drugs for HIV infection</i></p> <ul style="list-style-type: none"> <li>• Nucleoside reverse transcriptase inhibitors (e.g. zidovudine) and combinations</li> <li>• Protease inhibitors (e.g. darunivir)</li> <li>• Non-nucleoside reverse transcriptase inhibitors (e.g. nevirapine)</li> </ul>	<p><b>15. Hematological Diseases</b></p> <ul style="list-style-type: none"> <li>• Iron</li> </ul>

## REFERENCES

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2. Ross, S. and Maxwell, S., 2012. Prescribing and the core curriculum for tomorrow's doctors: BPS curriculum in clinical pharmacology and prescribing for medical students: Undergraduate medical curriculum for safe and effective prescribing. British Journal of Clinical Pharmacology, 74(4), pp.644–661.
3. Baker E, Roberts AP, Wilde K, Walton H, Suri S, Rull G, Webb A. Development of a core drug list towards improving prescribing education and reducing errors in the UK. Br J Clin Pharmacol. 2011; 71(2): 190–198. doi: 10.1111/j.1365-2125.2010.03823.x.