

## **Appendix 1**

### **First and second line drugs recommended in 12 selected NICE Clinical Guidelines.**

#### Definitions

First line drug = explicitly stated to be a first-line drug, or recommended for (almost) everyone with the condition.

Second-line/other drugs = explicitly stated to be a second or third line drug, or recommended for only some subgroups or in some not very common circumstances

#### Identified first and second line drugs

##### **1.- CG87 Type 2 Diabetes**

First line: Metformin, sulphonylurea, angiotensin-converting enzyme inhibitors (ACEI), simvastatin/atorvastatin.

Second line/other: Angiotensin-II receptor antagonists (ARB) for hypertension, calcium channel blocker for hypertension, diuretic for hypertension, alpha blocker for hypertension, beta-blocker for hypertension, K-sparing diuretic for hypertension, other statins (not simvastatin/atorvastatin), fibrate, erythromycin, phosphodiesterase type-5 inhibitors (PPDE5 inhibitors), metoclopramide, ezetemibe, omega-3 fish oil, domperidone, DPP-4 inhibitor/gliptin, thiazolidinedione, GLP-1 mimetic (exenatide), acarbose, insulin.

##### **2. CG90 Depression**

First line: Selective serotonin reuptake inhibitors (SSRI).

Second line: Venlafaxine, mirtazepine, duloxetine, reboxetine, flupentixol, tryptophan, mianserin, tricyclic antidepressant (TCA), monoamine oxidase inhibitor (MAOI), moclobemide, lithium, antipsychotic (ariPIPrazole, olanzapine, quetiapine, risperidone)

##### **3. CG108 Heart Failure**

First line: ACEI, beta blocker licensed for heart failure

Second line/other: Licensed aldosterone antagonist, digoxin, ARB, hydralazine, nitrate, loop diuretic, warfarin, amlodipine if comorbid hypertension/angina, aspirin if comorbid Coronary Heart Disease

##### **4. CG36 Atrial Fibrillation**

First line: Warfarin, aspirin, standard beta blocker, rate limiting calcium channel blocker.

Second line/other: Phenindione, dabigatran (rivaroxaban, apixaban), digoxin, sotalol, amiodarone, class 1c flecainide, class 1c propafenone

##### **5. CG42 Dementia**

First line: Donepezil, galantamine, rivastigmine.

Second line/other: memantine.

##### **6. CG 48 Secondary Prevention Post-MI**

First line: ACEI, aspirin, beta-blocker, statin.

Second line/other: ARB, clopidogrel, warfarin, diltiazem if beta-blocker contraindicated/not tolerated or hypertension/angina and not heart failure, verapamil if beta-blocker contraindicated/not tolerated or hypertension/angina and not heart failure, amlodipine for hypertension/angina and heart failure, proton pump inhibitor (PPI), aldosterone antagonist licensed post-MI, fibrates if intolerant of statin, omega 3 fatty acids, PPDE5 inhibitors, nicotine replacement therapy (NRT), bupropion.

#### 7. CG59 Osteoarthritis

First line: Paracetamol, topical NSAID.

Second line/other: Oral non-selective NSAID, cyclo-oxygenase-2 selective inhibitors, PPI if on NSAID, opioids (codeine/dihydrocodeine), topical capsaicin.

#### 8. CG73 CKD

First line: ACEI

Second line/other: Statins, antiplatelets, antihypertensives, ARB, vitamin D supplements, bisphosphonate.

#### 9. CG79 Rheumatoid Arthritis

First line: Methotrexate, sodium aurothiomalate, penicillamine, hydroxychloroquine, chloroquine, azathioprine, ciclosporin, leflunomide, sulfasalazine

Second line/other: Adalimumab, etanercept, infliximab, paracetamol, codeine, dihydrocodeine, NSAIDs, Cyclo-oxygenase-2 selective inhibitors, PPI

#### 10. CG96 Neuropathic Pain

First line: Amitriptyline, pregabalin.

Second line/other: Imipramine, nortriptyline, topical lidocaine, tramadol, duloxetine for painful diabetic neuropathy.

#### 11. CG101 COPD

First line: Short-acting beta<sub>2</sub> agonist (SABA), short-acting muscarinic antagonist (SAMA).

Second line/other: Long-acting muscarinic antagonist (LAMA), long- acting beta<sub>2</sub> agonist (LABA), inhaled corticosteroid, theophylline, mucolytic, NRT, varenicline, bupropion.(Excluded: palliative, oxygen, long term steroids, osteoporosis)

#### 12: CG127 Hypertension

First line: ACEI, ARB, calcium channel blocker, thiazide like diuretic.

Second line/other: Spironolactone, beta blocker, alpha blocker.