



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

National Essential Medicines List Committee (NEMLC)

TERTIARY AND QUATERNARY LEVEL

ESSENTIAL MEDICINES LIST

Reviewed Items

June 2022

SUMMARY OF CHANGES TO THE NEMLC TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES LIST (JUNE 2022)

| ATC CODE | MEDICINE | INDICATION | NEMLC OUTCOMES | REVIEW INDICATORS | DATE RATIFIED |
|--------------------------|--------------------|---|---|---|---------------|
| C CARDIAC THERAPY | | | | | |
| L01FA01 | Rituximab | B-cell indolent non-Hodgkin Lymphoma. | Not Approved <ul style="list-style-type: none"> Although the addition of rituximab to standard chemotherapy has shown to improve response rates and progression free survival in patients with indolent lymphomas, it is deemed to unaffordable at its current price in this indication. | <ul style="list-style-type: none"> Price (For reference price: refer to Rituximab review and cost effectiveness analysis documents). | 23 June 2022 |
| G02CB3 | Cabergoline | Prolactinoma, refractory/intolerant to bromocriptine. | Approved | n/a | 23 June 2022 |
| D05BB02 | Acitretin | Severe localized or generalized pustular psoriasis, or severe psoriasis not responding to conventional therapy under the care of a dermatologist. | Approved | n/a | 23 June 2022 |
| D05AC01 | Dithranol | Psoriasis. | Not Approved | <ul style="list-style-type: none"> Availability of registered product. Evidence of efficacy. | 23 June 2022 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|--|--|--|----------------------|---|---|
| A ALIMENTARY TRACT AND METABOLISM | | | | | |
| A04AA01/ A04AA02 | Serotonin-3 (5HT3) antagonists Ondansetron, Granisetron | Highly or moderately emetogenic chemotherapy | Approved | n/a | 20 September 2007 <i>(Indication updated 29 July 2021)</i> |
| A05AA02 | Ursodeoxycholic acid | Primary biliary cirrhosis. | Not Approved | <ul style="list-style-type: none"> The emergence of new evidence of efficacy with regard to mortality or transplantation | 13 March 2008 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---|--|---|---|--|-------------------|
| A07EC02 | Mesalazine | Ulcerative colitis – maintenance of remission. | Approved – Special Access Special access may be granted based on recommendation by PTC for patients with sulfonamide hypersensitivity. | <ul style="list-style-type: none"> Price (to be evaluated as a therapeutic class with sulfasalazine) | October 2015 |
| A10BG03 | Pioglitazone | Type 2 diabetes mellitus. | Not Approved | <ul style="list-style-type: none"> Robust safety data | February 2012 |
| A10AE05/ A10AE04 | Long acting insulin analogues Insulin detemir, Insulin glargine | Diabetes mellitus. | Not Approved | <ul style="list-style-type: none"> Price decrease (similar to Neutral Protamine Hagedorn (NPH) insulin) Evidence for superior safety of analogues over NPH | 30 June 2016 |
| A11/A12 | Micronutrients | Addition to Parenteral Nutrition for long-term use. | Approved <ul style="list-style-type: none"> Approved for use where long-term parenteral nutrition is required/anticipated. Short- term TPN should be done with off the shelf parenteral nutrition bags – no added micronutrients. | <ul style="list-style-type: none"> New evidence | 19 March 2020 |
| A16AA03 | Glutamine | Glutamine as a component of enteral and parenteral nutrition in critically ill patients. | Not Approved | <ul style="list-style-type: none"> Robust safety data Evidence of mortality efficacy | 30 June 2016 |
| A02BC | Proton Pump Inhibitors (PPIs), IV | For hospitalised patients requiring PPI therapy and are unable to take these orally or via nasogastric tube | Approved <ul style="list-style-type: none"> Only for hospitalised patients are unable to take PPIs orally or via nasogastric tube | n/a | 24 June 2021 |
| B BLOOD AND BLOOD FORMING ORGANS | | | | | |
| B01AC04 | Clopidogrel | Percutaneous coronary intervention (stenting). | Approved Clopidogrel plus aspirin recommended for a minimum of: <ul style="list-style-type: none"> 30 days in situations where a bare metal stent is inserted. 90 days in situations where a sirolimus drug-eluting stent is inserted. 180 days when a paclitaxel drug-eluting stent is inserted. Thereafter allow aspirin indefinitely. | n/a | 20 September 2007 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|--------------------------|---|---|--|---|-------------------|
| | | | The evidence currently available to the Committee does not provide support for use beyond 6 months although there are recommendations endorsing longer term use in high risk patients. | | |
| B01AC04 | Clopidogrel | Ischaemic heart disease (non-myocardial infarction). | Approved for long-term use only in patients intolerant to aspirin, i.e. allergy or bleeding episodes. | | 20 September 2007 |
| B01AC04 | Clopidogrel | Stroke. | Approved, only for long-term therapy where patient has confirmed aspirin intolerance. | <ul style="list-style-type: none"> • Decrease in clopidogrel price • New safety or efficacy data for either aspirin (at doses recommended by the DoH) or clopidogrel | 24 July 2014 |
| B01AC04 | Clopidogrel | Transient ischaemic attack with/without atrial fibrillation. | Not Approved | <ul style="list-style-type: none"> • Decrease in clopidogrel price • New safety or efficacy data for either aspirin or clopidogrel | 24 July 2014 |
| B02BD03 | Recombinant Factor VIIa (rFVIIa) | Intractable bleeding. | Not Approved | <ul style="list-style-type: none"> • Robust efficacy data | 29 June 2017 |
| B02BD03 | Haemophilia bypassing agents (rFVIIa/aPCC) | Haemophilia with inhibitors (on demand, when presenting with a significant bleed). | Approved, Special Access One bypassing agent to be available on the EML (most affordable). An alternative bypassing agent can be made available as emergency stock on a special access basis as approved by the PTC for patients not responding to EML item. | | 14 December 2017 |
| C CARDIAC THERAPY | | | | | |
| C02DC01 | Minoxidil | Severe hypertension not responding to other drugs. | Approved | n/a | 20 September 2007 |
| C09CA | Angiotensin receptor blockers (ARBs) | Add on therapy in cardiac failure on patients already on standard treatment including ACE-inhibitors, β -Blockers and spironolactone. | Not Approved | <ul style="list-style-type: none"> • New efficacy data from large RCT indicating larger benefit of adding ARBs to standard therapy • Decrease in price of ARBs so as to be similarly priced to ACE-inhibitors | 20 September 2007 |
| C09CA | Angiotensin receptor blockers (ARBs) | As add on therapy in proteinuric nephropathies in patients already using an ACE-inhibitor. | Not Approved Insufficient evidence to support its use. | <ul style="list-style-type: none"> • New evidence indicating benefit in the form of a RCT of | 20 September 2007 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|--|--|---|--|---|---|
| | | | | sufficient size with maximal doses of ACE-inhibitor used <ul style="list-style-type: none"> • New safety concerns. • Decrease in price so as to be similarly priced to ACE-inhibitors | |
| C10AA05 | Atorvastatin – high dose (80 mg/day) | Familial hypercholesterolaemia | Approved For patients within the lipid clinic setting. | <ul style="list-style-type: none"> • n/a | 31 March 2022 |
| D ANTIPRURITICS, INCLUDING ANTIHISTAMINES, ANAESTHETICS, ETC. | | | | | |
| D05AC01 | Dithranol | Psoriasis. | Not Approved | <ul style="list-style-type: none"> • Availability of registered product. Evidence of efficacy. | 23 June 2022 |
| D07AD | Very potent topical corticosteroid – Group IV e.g. Clobetasol 0.05% Examples: Cream/ointment: <ul style="list-style-type: none"> • Clobetasol propionate 0.05%. | | Approved Lowest price high potency corticosteroid to be used. | n/a | 20 September 2007 |
| D10BA01 | Isotretinoin | Moderate to severe recalcitrant nodular acne | Approved | n/a | 24 June 2021 <i>(Previously reviewed 09 February 2012)</i> |
| D05BB02 | Acitretin | Severe localized or generalized pustular psoriasis, or severe psoriasis not responding to conventional therapy under the care of a dermatologist. | Approved | n/a | 23 June 2022 |
| D06BB10 | Imiquimod 5% topical | Anogenital warts | Not Approved | New evidence | 24 June 2021 |
| G GENITO URINARY SYSTEM AND SEX HORMONES | | | | | |
| G02CB3 | Cabergoline | Prolactinoma, refractory/intolerant to bromocriptine. | Approved | n/a | 23 June 2022 |
| G03AC03 | Levonorgestrel Intrauterine system | Abnormal Uterine Bleeding (3 rd line therapy) | Approved <ul style="list-style-type: none"> • Third line therapy where there has been treatment failure. | n/a | 27 September 2018 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|--|--|---|---|--|-------------------|
| | | | <ul style="list-style-type: none"> Prescribed and inserted by a gynaecologist. | | |
| G03CA | Estrogen | Gender Dysphoria – Feminising regimen | Approved | New evidence | 5 December 2019 |
| G03BA03 | Testosterone | Gender Dysphoria – Masculinising regimen | Approved | New evidence | 5 December 2019 |
| G03DA02/ G03HA01 | Medroxyprogesterone acetate OR Cyproterone acetate | Patients with hypersexual behaviour including paraphilia's | Approved <ul style="list-style-type: none"> Most affordable agent should be procured. If price parity: cyproterone is preferred due to decreased frequency of dosing. | <ul style="list-style-type: none"> Evidence of harm Price reduction | 11 April 2019 |
| G03HB01 | Cyproterone, Ethinyl estradiol | Hirsutism. | Approved | n/a | 20 September 2007 |
| G04BD10 | Urinary antispasmodics Darifenacin | Over active bladder (OAB) with symptoms of urinary urgency, frequency and/or urge incontinence. | Not Approved | <ul style="list-style-type: none"> Price New safety/efficacy data | 13 March 2008 |
| G04CB01 | Finasteride | Benign prostatic hyperplasia. | Not Approved | <ul style="list-style-type: none"> Price | 13 March 2008 |
| H SYSTEMIC HORMONAL PREPARATIONS, EXCL. SEX HORMONES AND INSULINS | | | | | |
| H01AA01 | Adrenocorticotrophic hormone (ACTH) | Infantile spasms. | Not Approved | <ul style="list-style-type: none"> Well controlled studies of proven efficacy of ACTH | September 2010 |
| H01AC01 | Somatropin (Growth Hormone) | Turner's syndrome. | Not Approved | <ul style="list-style-type: none"> Improved cost-effectiveness. | 20 September 2007 |
| H01AC01 | Somatropin (Growth Hormone) | Prader Willi syndrome. | Not Approved | <ul style="list-style-type: none"> Price | 20 September 2007 |
| H01AC01 | Somatropin (Growth Hormone) | Intrauterine growth failure. | Not Approved | <ul style="list-style-type: none"> Price | 20 September 2007 |
| H01AC01 | Somatropin (Growth Hormone) | Idiopathic short stature. | Not Approved | <ul style="list-style-type: none"> Improved cost-effectiveness | 20 September 2007 |
| H01AC01 | Somatropin (Growth Hormone) | Chronic renal insufficiency. | Not Approved | <ul style="list-style-type: none"> Evidence of benefit | 20 September 2007 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---|---|--|--|--|-----------------|
| H01AC01 | Somatropin (Growth Hormone) | Growth hormone deficiency. | Approved Approved for confirmed growth hormone deficiency for use by endocrinologists only. Rationale: <ul style="list-style-type: none"> The condition is a well-defined deficiency state that can be managed and monitored. Number of patients requiring treatment is small. | <ul style="list-style-type: none"> New evidence on quality of life assessment in local and specific populations | 24 July 2008 |
| H01BA05 | Ornipressin | Bleeding associated with bronchoscopy and renal biopsy. | Not Approved | <ul style="list-style-type: none"> New high quality evidence of superior efficacy to adrenalin | 29 October 2012 |
| H01CB02 | Octreotide (Short-acting) | Persistent neonatal hyperinsulinism and hypoglycaemia. | Approved The condition is rare; usage is for short term; alternative agents are limited and the consequences of not having treatment available are serious. | | |
| H01CB | Somatostatin analogs Octreotide, Lanreotide | Neuro-endocrine tumours. | Not Approved | <ul style="list-style-type: none"> Long term survival and quality of life data | 26 March 2015 |
| J ANTI-INFECTIVES FOR SYSTEMIC USE | | | | | |
| J01XC01 | Fusidic acid | Treatment of staphylococcal infections, mainly involving bone and joints: <ul style="list-style-type: none"> Methicillin-sensitive organisms, as alternative to cloxacillin or flucloxacillin. Methicillin-sensitive organisms, in combination with cloxacillin or flucloxacillin. Methicillin-resistant organisms, as an alternative to e.g. glycopeptides or oxazolidinones (linezolid), especially in cases | Not Approved | <ul style="list-style-type: none"> New evidence of clinical comparative efficacy against alternatives, especially regarding long- term treatment of MRSA where the oral preparation may be of benefit in comparison to parenteral glycopeptides and infections with glycopeptide resistant organisms where the potential toxicity of oxazolidinones (linezolid) when used for | 13 March 2008 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|-------------------------|--|---|---|--|------------------|
| | | where prolonged treatment is required. | | prolonged periods of time, may be problematic | |
| J01XX08 | Linezolid | Resistant gram positive infections where vancomycin is contra-indicated. | <p>Approved – Special Access</p> <p>It may be available on special access basis as approved by PTC for:</p> <ul style="list-style-type: none"> • Only with a microbiology report confirming vancomycin resistance in a relative organism or confirmation of severe adverse effect to vancomycin, (i.e. vancomycin induced neutropenia or anaphylaxis, but not the “red man syndrome”). • Confirmed contra-indication to the use of vancomycin. | <ul style="list-style-type: none"> • Clinically significant increase in vancomycin resistance in the public sector • Significant decrease in cost of linezolid | 27 November 2008 |
| J02AB02 | Ketoconazole | Cushing’s syndrome. | Approved | <ul style="list-style-type: none"> • Availability of alternate medication for this indication with superior efficacy or safety profile. New safety concerns | 10 July 2008 |
| J02AC02 | Itraconazole | Histoplasmosis. | Not Approved | <ul style="list-style-type: none"> • New evidence of clinical comparative efficacy against alternatives, especially weekly Amphotericin B • Significant increase in incidence of the condition. • Significant change in pricing | 13 March 2008 |
| J02AX04/J02AX05/J02AX06 | Echinocandins (caspofungin/micafungin/anidulafungin) | Invasive candidiasis (resistant to fluconazole/amphotericin B and/or where renal dysfunction is present and amphotericin B cannot be used). | <p>Approved – Special Access</p> <ul style="list-style-type: none"> • Echinocandins approved as a class, with the most affordable agent to be procured. • The use of echinocandins should be managed through motivation/ appropriate restrictions at facilities, as part of Antimicrobial Stewardship activities. (See addendum – clinical criteria for use) | <ul style="list-style-type: none"> • Availability of amphotericin B • Changing resistance patterns • New evidence | 12 April 2018 |
| J02AC03 | Voriconazole (VCZ) | Treatment of invasive Aspergillosis. | Not Approved | <ul style="list-style-type: none"> • High quality randomised controlled trial with amphotericin B as the comparator | 13 March 2008 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---|--|--|---|---|------------------|
| J05AB04 | Ribavirin | Viral haemorrhagic fever (VHF). | Approved To be supplied on motivation from a central supply point. | n/a | 27 June 2013 |
| J06BA02 | Intravenous Immunoglobulin (IVIG) | Acute Immune thrombocytopenic Purpura (ITP) | Approved <ul style="list-style-type: none"> • Life-threatening bleed with platelets <50 x 10⁹/l. • Urgent surgery (any surgery urgently required within 24 hours) where rapid rise in platelets is required. • Pregnant patient prior to delivery as above. • Rapid rise in platelets required when a patient has platelet count of < 20 x 10⁹/L, with additional risk factors for bleeding (such as severe hypertension, ongoing sepsis). | <ul style="list-style-type: none"> • Evidence of harm | 5 July 2018 |
| J06BA02 | Intravenous Immunoglobulin (IVIG) | Primary antibody immune deficiency with recurrent infections | Approved | <ul style="list-style-type: none"> • New data on dosing • Availability of more affordable subcutaneous formulations | 11 April 2019 |
| J06BA02 | Intravenous Immunoglobulin (IVIG) | Guillain-Barré syndrome (GBS) presenting within the first 2 weeks of onset of moderate to severe weakness. | Approved The recommended regimen is 0.4 g/kg daily for 5 days. | <ul style="list-style-type: none"> • New evidence | 5 December 2019 |
| J06BB16 | Palivizumab | Respiratory syncytial virus (RSV) infection in high-risk premature infants. | Not Approved | <ul style="list-style-type: none"> • Price reduction | 25 April 2013 |
| L ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS | | | | | |
| L01 | Chemotherapy Platinum coordination compounds, Taxanes, Doxorubicin, Cyclophosphamide | Uterine Cancer/ Endometrial Cancer (Advanced stage and recurrent). | Not Approved | <ul style="list-style-type: none"> • Better quality data | 22 January 2015 |
| L01AA01 | Cyclophosphamide | Adjuvant breast cancer. | Approved (Cyclophosphamide plus Doxorubicin (AC)). | n/a | 27 November 2008 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|----------|-------------------------------|--|---|---|-------------------|
| L01AA01 | Cyclophosphamide | Adjuvant breast cancer. | Approved (Cyclophosphamide plus methotrexate plus fluoro-uracil (CMF)). | n/a | 27 November 2008 |
| L01AA01 | Cyclophosphamide | Adjuvant breast cancer. | Approved (Fluoro-uracil plus Doxorubicin plus cyclophosphamide (FAC)). | n/a | 27 November 2008 |
| L01AA02 | Chlorambucil | Chronic lymphocytic leukemia, low grade non-Hodgkin's lymphoma | Approved | n/a | 11 July 2019 |
| L01AA03 | Melphalan | Multiple myeloma (oral-remission induction combined with steroids in older) (IV –pre-autologous stem cell transplant in multiple myeloma and lymphomas). | Approved | n/a | 11 July 2019 |
| L01AA06 | Ifosfomide | Germ cell tumours, soft tissue sarcomas, salvage therapy in lymphomas pre-autologous stem cell transplant. | Approved | n/a | 11 July 2019 |
| L01AB01 | Busulfan | Pre allogeneic and autologous stem cell transplant conditioning | Approved | n/a | 11 July 2019 |
| L01AX03 | Temozolomide | Glioblastoma multiforme. | Not Approved | <ul style="list-style-type: none"> Prospective RCTs demonstrating a significant increase in effect size Significant price reduction | 25 July 2013 |
| L03AX03 | Bacille Calmette-Guerin (BCG) | Bladder Cancer (non-muscle invasive) | Approved | None | 25 February 2016 |
| L01AX04 | Dacarbazine | Hodgkin's lymphoma. | Approved | n/a | 11 July 2019 |
| L01BA01 | Methotrexate | Adjuvant breast cancer. | Approved (Cyclophosphamide plus methotrexate plus fluoro-uracil (CMF)). | n/a | 27 November 2008 |
| L01BA04 | Pemetrexed | Lung mesothelioma. | Not Approved | <ul style="list-style-type: none"> Price changes or access programmes | 27 November 2008 |
| L01BA04 | Pemetrexed | Non-small cell lung cancer. | Not Approved | <ul style="list-style-type: none"> Evidence of superior efficacy vs. cisplatin/gemcitabine. Price reduction | 29 September 2011 |
| L01BB02 | Mercaptopurine | Acute leukaemia. | Approved | n/a | 11 July 2019 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---------------------|-------------------------------|--|--|---|-------------------|
| L01BB03 | Thioguanine | Acute leukemia. | Approved | n/a | 11 July 2019 |
| L01BB05 | Fludarabine | Chronic lymphocytic leukaemia, non-Hodgkin's lymphomas, pre-conditioning regimen for allogeneic stem cell transplant, AML salvage therapy. | Approved | n/a | 11 July 2019 |
| L01BC01 | Cytarabine | Acute myeloid leukaemia (AML) and acute lymphoid leukaemia (ALL). | Approved | n/a | 11 July 2019 |
| L01BC02 | Topical 5 Fluorouracil | Actinic Keratosis. | Approved Approved as Historically Accepted Use. | n/a | 19 March 2020 |
| L01BC06 | Capecitabine | Relapsed metastatic breast cancer failing an anthracycline and a taxane. | Not Approved | <ul style="list-style-type: none"> Price changes | 15 September 2016 |
| L01BC06 | Capecitabine | Metastatic colorectal – first-line. | Approved (as part of the XELOX regimen). | <ul style="list-style-type: none"> Availability of data for alternative oral fluoropyrimidines Price increases not commensurate with approved SEP increases | 27 November 2008 |
| L01BC06 | Capecitabine | First-line therapy for advanced stomach/gastro-oesophageal junction cancer. | Approved | None | 27 July 2014 |
| L01BC06/ L01BC05 | Capecitabine plus Gemcitabine | Adjuvant chemotherapy of fully resected potentially curable pancreatic adenocarcinoma). | Approved <ul style="list-style-type: none"> Only for fully resected patients. | <ul style="list-style-type: none"> New adjuvant chemotherapy data in patients with R0 or R1 resected adenocarcinoma of the pancreas | 6 December 2018 |
| L01BC52 | Fluoro-uracil | Adjuvant breast cancer. | Approved (Cyclophosphamide plus methotrexate plus fluoro-uracil (CMF)). | n/a | 27 November 2008 |
| L01BC52 | Fluoro-uracil | Adjuvant colorectal cancer. | Approved (Fluoro-uracil plus Doxorubicin plus cyclophosphamide (FAC)). | n/a | 27 November 2008 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|----------|---|--|--|---|-------------------|
| L01CA01 | Vinblastine | Relapsed metastatic breast cancer (mBC) failing an anthracycline and a taxane. | Approved | n/a | 15 September 2016 |
| L01CA02 | Vincristine | General haematology and oncology | Approved | n/a | 27 September 2018 |
| L01CA04 | Vinorelbine | Adjuvant non-small cell lung cancer (NSCLC) – completely resected. | Approved To be used with cisplatin for adjuvant therapy for stage IIIA NSCLC but not stage IB or stage II. | New evidence of efficacy of adjuvant therapy in NSCLC | 03 December 2009 |
| L01CA04 | Vinorelbine (IV) | Relapsed metastatic breast cancer (mBC) failing an anthracycline and a taxane. | Approved | n/a | 15 September 2016 |
| L01CA04 | Vinorelbine (oral) | Relapsed metastatic breast cancer (mBC) failing an anthracycline and a taxane. | Not Approved | <ul style="list-style-type: none"> • Price similar to oral • Evidence of clinical superiority | 15 September 2016 |
| L01CD | Taxanes Docetaxel, Paclitaxel | Adjuvant breast cancer. | Approved Approved for patients with high grade, node positive ER negative disease. | n/a | 23 August 2012 |
| L01CD01 | Paclitaxel | Neoadjuvant/recurrent/ metastatic head and neck cancer. | Not Approved | n/a | 27 July 2014 |
| L01CD01 | Paclitaxel | First-line chemotherapy in advanced non-small cell lung cancer (NSCLC). | Approved | None | 22 January 2015 |
| L01CD01 | Paclitaxel | Metastatic cervical carcinoma. | Approved | n/a | 11 July 2019 |
| L01CD | Taxanes | Metastatic breast cancer – first- and second-line. | Approved | <ul style="list-style-type: none"> • Change in the price of taxanes, specifically docetaxel. | 16 September 2010 |
| L01CD02 | Docetaxel | Squamous cell carcinoma of head and neck. | Approved Approved for patients with good performance status and adequate follow-up used in combination with cisplatin plus 5-fluoro-uracil. | None | 25 July 2013 |
| L01CD02 | Docetaxel | Second-line therapy for advanced non-small cell lung cancer | Approved | None | 22 January 2015 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|----------|--------------|--|---|---|-------------------|
| | | (NSCLC) in selected patients with good performance status (ECOG 0;1). | | | |
| L01CD02 | Docetaxel | Castrate resistant prostate cancer. | Approved Docetaxel 75mg/m ² intravenously 3 times weekly plus prednisone 10mg orally, for 6 cycles. | <ul style="list-style-type: none"> Reduction in cost and availability of 3rd generation ARBs e.g. enzalutamide and CYP17 inhibitors e.g. abiraterone | 11 July 2019 |
| L01CD02 | Docetaxel | Patients with hormone sensitive prostate cancer (HSPC). | Approved For patients with high volume disease: defined as the presence of visceral metastases or ≥4 bone lesions with ≥1 beyond the vertebral bodies and pelvis | <ul style="list-style-type: none"> New evidence | 30 January 2020 |
| L01DB01 | Doxorubicin | Adjuvant breast cancer. | Approved (Doxorubicin plus cyclophosphamide (AC)). | None | 27 November 2008 |
| L01DB01 | Doxorubicin | Adjuvant breast cancer. | Approved (Fluoro-uracil plus Doxorubicin plus cyclophosphamide (FAC)). | None | 27 November 2008 |
| L01DB02 | Daunorubicin | acute myeloid leukaemia (AML) and acute lymphoid leukaemia (ALL) | Approved | n/a | 11 July 2019 |
| L01DB06 | Idarubicin | Acute Myeloid Leukemia. | Approved | n/a | 10 December 2015 |
| L01DB07 | Mitoxantrone | General oncology. | Approved Indications for consideration: Advanced stage carcinomas, paediatric relapsed acute lymphoblastic leukaemia (ALL), paediatric acute myeloid leukaemia (AML). | None | 30 June 2016 |
| L01DB03 | Epirubicin | Advanced stage or metastatic oesophageal junction and gastric carcinoma. | Approved | None | 10 December 2015 |
| L01DC01 | Bleomycin | Hodgkin's, Kaposi, Germ cell tumours, Pleuradhesion. | Approved | None | 27 September 2018 |
| L01DC03 | Mitomycin C | Bladder Cancer. | Not Approved | None | 25 February 2016 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|----------|-------------|--|---|---|-------------------|
| L01DC03 | Mitomycin C | Relapsed metastatic breast cancer (mBC) failing an anthracycline and a taxane. | Not Approved | None | 15 September 2016 |
| L01FA01 | Rituximab | CD20 positive diffuse large B-cell non-Hodgkin's lymphoma: first-line. | Approved for treatment in diffuse large B-cell non-Hodgkin's lymphoma (DLBCL) patients except those with International Prognostic Index (IPI) of 0. | New anti-CD20 monoclonal antibodies, more data and international consensus statements in FL patients, rituximab price changes | 23 August 2012 |
| L01FA01 | Rituximab | Rheumatoid Arthritis patients refractory to synthetic DMARDs. | Approved For patients with refractory RA, who have failed ≥ 3 DMARDs taken for ≥ 6 months. (in accordance with algorithm) | Evidence of harm | 5 July 2018 |
| L01FA01 | Rituximab | Refractory lupus nephritis. | Approved – Special Access <ul style="list-style-type: none"> Special Access may be granted on recommendation by the PTC. Used as per NEMLC-approved treatment algorithm. Use must be monitored and managed by PTCs through a registry. Clinical outcomes to be shared with the National registry database for biological therapy. | <ul style="list-style-type: none"> Changes in evidence of efficacy/safety Change in cost | 11 April 2019 |
| L01FA01 | Rituximab | CD20 positive indolent B-cell non-Hodgkin's lymphoma | Not Approved for treatment in indolent B-Cell non-Hodgkin's lymphomas | <ul style="list-style-type: none"> Further evidence review Price reduction | 24 June 2021 |
| L01FA01 | Rituximab | B-cell indolent non-Hodgkin Lymphoma. | Not Approved Although the addition of rituximab to standard chemotherapy has shown to improve response rates and progression free survival in patients with indolent lymphomas, it is deemed to unaffordable at its current price in this indication. | <ul style="list-style-type: none"> Price (For reference price: refer to Rituximab review and cost effectiveness analysis documents). | 23 June 2022 |
| L01XA01 | Cisplatin | Adjuvant small cell lung cancer. | Approved | None | 27 November 2008 |
| L01XA01 | Cisplatin | Adjuvant lung cancer. | Approved | None | 27 November 2008 |
| L01XA01 | Cisplatin | Relapsed metastatic breast cancer (mBC) failing an anthracycline and a taxane. | Approved To be used with gemcitabine | None | 15 September 2016 |
| L01XA01 | Cisplatin | Radio-sensitizer in cervical cancer | Approved | None | 6 December 2018 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|----------|-------------|---|----------------------------------|---|------------------|
| L01XA01 | Cisplatin | Advanced/Metastatic: Various Cancers | Approved | n/a | 11 July 2019 |
| L01XA01 | Cisplatin | Adjuvant/Neoadjuvant: various cancers. | Approved | n/a | 11 July 2019 |
| L01XA02 | Carboplatin | Adjuvant lung cancer. | Approved | None | 27 November 2008 |
| L01XA02 | Etoposide | Adjuvant small cell lung cancer. | Approved | None | 27 November 2008 |
| L01XA03 | Oxaliplatin | Adjuvant colorectal. | Not Approved | • Mature published data | 27 November 2008 |
| L01XA03 | Oxaliplatin | First or second-line metastatic colorectal cancer. | Approved | None | 10 December 2015 |
| L01XC07 | Bevacizumab | Sub-retinal neovascular membranes and non-resolving macular odema. | Approved (off label indication). | None | 10 December 2015 |
| L01XE01 | Imatinib | Chronic phase of chronic myeloid leukemia. | Approved | None | 27 March 2014 |
| L01XE01 | Imatinib | Gastrointestinal Stromal Tumours (GIST) - adjuvant therapy. | Approved | None | 25 June 2015 |
| L01XE01 | Imatinib | Gastrointestinal Stromal Tumours (GIST) - metastatic therapy. | Approved | None | 25 June 2015 |
| L01XE08 | Nilotinib | Chronic Myeloid Leukemia in patients resistant or intolerant to imatinib. | Approved | <ul style="list-style-type: none"> • Longer term follow-up of nilotinib versus imatinib showing clinical benefits in the first line • Reduction in cost or availability of nilotinib generics | 22 January 2015 |
| L01XC02 | | | | • | |
| L01XC02 | | | • | • | |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|----------|--|---|--|---|---|
| L01XC02 | | | | • | |
| L01XC02 | | | | • | |
| L01XC03 | Trastuzumab | Adjuvant treatment for early stage HER-2 positive breast cancer, 6 month regimen. | Approved Regimen: administered 3 weekly for a period of 6 months . | • New evidence | 5 December 2019 <i>(previously reviewed: 29 June 2017)</i> |
| L01XG01 | Bortezomib | Transplant eligible multiple myeloma | Approved – Special Access Data to ensure rational use to be submitted for all patients by PTCs to the National Department of Health. | • New evidence Price | 25 March 2021 |
| L01XX02 | Asparaginase | Acute lymphoblastic leukemia (ALL) | Approved | n/a | 11 July 2019 |
| L01XX14 | All-trans retinoic acid (tretinoin) | Acute promyelocytic leukaemia | Approved | None | 27 September 2018 |
| L01XX19 | Irinotecan | Adjuvant colorectal. | Not Approved | • Evidence to show benefit | 27 November 2008 |
| L01XX19 | Irinotecan | First- or second-line metastatic colorectal cancer. | Approved | None | 10 December 2015 |
| L02AE03 | Gonadotrophin-releasing hormone (GnRH) analogue Goserelin, Buserelin | Endometriosis. | Approved for use in the following situations: <ul style="list-style-type: none"> • For endometriosis-associated infertility prior to in vitro fertilisation (IVF). For medical management in situations in which a trial of adequate analgesia or the use of combined oral contraceptives is unsuccessful. | <ul style="list-style-type: none"> • New evidence based on Goserelin vs. Placebo • Large comparative trials with COCs for both “trial of hormone therapy” and for relief of pain • Comparisons with new agents such as aromatase inhibitor | 13 March 2008 |
| L02AE03 | Gonadotrophin-releasing hormone (GnRH) analogue | Precocious puberty. | Approved Choice of GnRH analogue will depend on best tender price. | • Change in price or registration of new agents which are cheaper or more efficacious, or both. New safety concerns | 13 March 2008 |
| L02AE03 | Gonadotrophin-releasing hormone (GnRH) analogue | As bridging therapy until orchiectomy. | Approved Only Approved as bridging therapy - not long-term management. | • Price | 25 February 2016 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---------------------|---|--|--|--|-------------------|
| L02AE03 | Goserelin | Hormone receptor positive breast cancer in premenopausal women. | Not Approved | None | 10 December 2015 |
| L02BA01 | Tamoxifen | Adjuvant breast cancer. | Approved | None | 27 November 2008 |
| L02BA01 | Tamoxifen | Metastatic breast cancer. | Approved | None | 27 November 2008 |
| L02BA03 | Fulvestrant | Advanced Breast Cancer (ABC) Hormone Receptor Positive (HR+) [C50] – third or fourth line therapy | Not Approved This status will be reconsidered if offered/contract price is comparable or lower than that of standard chemotherapy. | Price | 25 March 2021 |
| L02BB01/ L02BB03 | Anti-androgens Flutamide, Bicalutamide | Advanced prostate cancer. | Not Approved Orchiectomy preferred. | None | 29 October 2012 |
| L01BC05 | Gemcitabine | Pancreatic cancer. | Not Approved | • Reduction in cost of gemcitabine | 29 October 2012 |
| L01BC05 | Gemcitabine | First-line chemotherapy in advanced non-small cell lung cancer (NSCLC) in patients intolerant to paclitaxel. | Approved Approved in patients intolerant to paclitaxel. | n/a | 22 January 2015 |
| L01BC05 | Gemcitabine | Relapsed metastatic breast cancer (mBC) failing an anthracycline and a taxane. | Approved | n/a | 15 September 2016 |
| L02BG | Aromatase inhibitors Anastrozole, Letrozole, Exemestane | Adjuvant breast cancer. | Approved for use in women with confirmed intolerance to tamoxifen, i.e. thrombo-embolic disease or endometrial hyperplasia (proven on ultrasound). Choice of aromatase inhibitor will depend on best tender price. | <ul style="list-style-type: none"> • Publication of the ongoing Secondary Adjuvant Long term Study with Arimidex (SALSA) study and ATAC • Long term data BIG 1-98 • TEAM data late in 2008 • Price parity with tamoxifen | 27 November 2008 |
| L02BG | Aromatase inhibitors | Metastatic breast cancer. | Approved for use as second-line therapy after tamoxifen in advanced breast cancer in postmenopausal women who do not have visceral metastases. Choice of aromatase inhibitor will depend on best tender price. | <ul style="list-style-type: none"> • Further developments regarding tamoxifen pharmacogenetics | September 2010 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|----------|------------|--|---|--|-------------------|
| L03AA02 | Filgrastim | Febrile neutropaenia. | Approved under the following conditions: <ul style="list-style-type: none"> • Patients must have had 3 days of appropriate antimicrobial therapy without resolution of infection. • Filgrastim can be used up to a maximum of 5 days with a daily review of white cell count (WCC). Failure to respond must prompt further investigation of neutropenia. | None | 27 November 2008 |
| L03AA02 | Filgrastim | ARV-induced neutropenia. | Not Approved This does not preclude the use of filgrastim in the management of febrile neutropenia (see above) in HIV infected patients. | <ul style="list-style-type: none"> • RCTs, with improved clinically relevant outcomes, especially mortality | 27 November 2008 |
| L03AA02 | Filgrastim | Prophylactic use in children with high-risk acute lymphoblastic leukaemia (HR-ALL). | Not Approved | <ul style="list-style-type: none"> • The emergence of evidence that routine use of GCSF improves outcomes in HR-ALL. • A significant reduction in the price of GCS | 3 December 2009 |
| L03AA02 | Filgrastim | Peripheral blood stem cell harvesting in autologous stem cell harvesting in haematological malignancies. | Approved | n/a | 24 July 2014 |
| L03AA02 | Filgrastim | Chemotherapy-induced febrile neutropenia. | Approved for secondary prophylaxis in curable cancers requiring full dosing on-schedule, i.e. Hodgkins and germ cell tumours. | n/a | 9 February 2012 |
| L03AA02 | Filgrastim | Chemotherapy-induced febrile neutropenia. | Not Approved for primary prophylaxis as no overall survival benefit and limited mortality benefit has been shown. | n/a | 9 February 2012 |
| L04AA04 | ATG | Induction therapy in <u>high risk</u> renal transplantation recipients. | Approved | None | 29 June 2017 |
| L04AA10 | Sirolimus | Renal transplant. | Approved for use only patients with biopsy-confirmed calcineurin inhibitor toxicity because of deteriorating kidney function (i.e. in patients at ongoing risk of acute rejection with no overt proteinuria and preserved GFR > 40mL/min) where mycophenolate mofetil is contra-indicated. | <ul style="list-style-type: none"> • Reduction in cost or new efficacy data | 16 September 2010 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---------------------|------------------------------------|--|---|--|-------------------|
| L04AA06 | Mycophenolate mofetil (MMF) | Lupus Nephritis. | Approved for both the induction and maintenance phases of treatment of lupus nephritis. | None | 18 September 2014 |
| L04AA06 | Mycophenolate mofetil (MMF) | Prevention of acute rejection post-renal transplantation. | Approved for prevention of acute rejection post-renal transplantation. | <ul style="list-style-type: none"> Reduction in cost or new efficacy data | 16 September 2010 |
| L04AA13 | Leflunomide | As add-on therapy in Rheumatoid Arthritis. | Approved – Special Access Special access be permitted on recommendation by PTC for intolerance to standard therapy. | <ul style="list-style-type: none"> New efficacy data or reduction in cost | 31 March 2016 |
| L04AA13 | Leflunomide | Rheumatoid Arthritis where patients are intolerant or have contraindications to methotrexate and sulphasalazine. | Approved Only for use in patients with intolerance to standard DMARD therapy (methotrexate or sulphasalazine) | <ul style="list-style-type: none"> New evidence Safety concerns Price change | 12 April 2018 |
| L04AA04 | Antithymocyte immunoglobulin (ATG) | Aplastic Anaemia. | Approved (in combination with ciclosporin and corticosteroids) | None | 10 December 2015 |
| L04AA31 | Teriflunomide | Relapsing remitting multiple sclerosis. | Approved Provided offered price is comparable or lower than beta interferon | <ul style="list-style-type: none"> New evidence of clear benefit of efficacy of newer classes Price changes | 19 March 2020 |
| L04AB02 | Infliximab | Fistulising Crohn's Disease. | Not Approved | <ul style="list-style-type: none"> A considerable change in the price of the drug | 20 September 2007 |
| L04AB02 | Infliximab | Rheumatoid Arthritis. | Not Approved | <ul style="list-style-type: none"> Demonstration in randomized trials of reduction in clinically significant endpoints, e.g. hospitalizations, joint replacements, etc. Evidence of sustained, clinically relevant improvement upon withdrawal of infliximab A significant reduction in the price of the medicine | 13 March 2008 |
| L03AB07/ L03AB08 | Interferon beta | Relapsing remitting multiple sclerosis | Approved | <ul style="list-style-type: none"> New evidence of clear benefit of efficacy of newer classes Price | 30 January 2020 |
| L04AC02 | Basiliximab | Induction therapy in <u>low risk</u> patient's renal transplantation recipients. | Approved | None | 29 June 2017 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---------------------------------|---|---|--|---|------------------------------------|
| L04AD01 | Ciclosporin | Organ transplantation. | Approved | n/a | 20 September 2007 |
| L04AD02 | Tacrolimus | <ul style="list-style-type: none"> Primary therapy in high immunological risk renal allograft recipients. Renal allograft recipients on ciclosporin who experience steroid resistant acute allograft rejection. | Approved | None | 29 June 2017 |
| L04AX02 | Thalidomide | Multiple myeloma. | Approved | <ul style="list-style-type: none"> Price | June 2019 (reference price met) |
| M MUSCULOSKELETAL SYSTEM | | | | <ul style="list-style-type: none"> | |
| M03BX01 | Baclofen | Spasticity. | Not Approved | <ul style="list-style-type: none"> New evidence of clinically relevant efficacy | 25 June 2015 |
| M03AX01 | Botulinum toxin | Focal dystonias. | Approved for use in carefully selected patients. Only to be administered by suitably experienced practitioners. | <ul style="list-style-type: none"> New evidence with clinical relevant/well defined endpoints and well described dosage regimens | 30 June 2016 |
| M03AX01 | Botulinum toxin | Spastic cerebral palsy. | Not Approved | <ul style="list-style-type: none"> New evidence with clinical relevant/well defined endpoints and well described dosage regimens | Re-review: 30 June 2016 |
| M05BA | Bisphosphonates Zoledronate, Ibandronic acid | Malignant bone disease in multiple myeloma. | Approved | <ul style="list-style-type: none"> New evidence of harm | 25 July 2013 |
| M05BA03 | Pamindronate | Hypercalcaemia of malignancy. | Approved | n/a | 20 September 2007 |
| M05BA04 | Alendronate | Osteogenesis imperfect. | Not Approved | <ul style="list-style-type: none"> Evidence of efficacy and safety | 25 July 2013 |
| M05BA04 | Alendronate | Paget's. | Not Approved | <ul style="list-style-type: none"> New high quality adequately powered trials providing evidence addressing clinically important parameters New safety concerns | September 2007 |
| N NERVOUS SYSTEM | | | | | |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|--------------------------------|--|---|---|---|------------------|
| N03AG04 | Vigabatrin | Refractory partial epilepsy. | Not Approved | <ul style="list-style-type: none"> • Good quality evidence to support the efficacy and safety in infantile spasms. | 3 December 2009 |
| N03AG04 | Vigabatrin | Infantile spasms. | Not Approved | <ul style="list-style-type: none"> • Good quality evidence to support the efficacy and safety in infantile spasms. | 3 December 2009 |
| N03AX11 | Topiramate | Initial therapy (epilepsy). | Not Approved | <ul style="list-style-type: none"> • New evidence, re: clinical efficacy of topiramate vs. alternatives as add-on therapy for resistant epilepsy • New evidence, re: efficacy in comparison with alternatives as initial therapy for epilepsy, where the current evidence supports using the alternative agents | 3 December 2009 |
| N03AX11 | Topiramate | Add-on therapy for resistant epilepsy. | Approved | <ul style="list-style-type: none"> • Evidence that the product is accounting for disproportionate amount of anti-epileptic spend | 26 March 2015 |
| N03AX14 | Levetiracetam | Add-on therapy for resistant epilepsy. | Not Approved | <ul style="list-style-type: none"> • Price • Data in HIV patients | 25 June 2015 |
| N03AX12/ N03AX16 | <p>α2δ calcium channel ligands</p> <p>Gabapentin, Pregabalin</p> | Patients with peripheral neuropathy refractory or intolerant to standard of care (e.g. amitriptyline; or carbamazepine) | <p>Approve – Special Access</p> <p>Special access may be granted on recommendation by PTC in the refractory or intolerant setting.</p> | <ul style="list-style-type: none"> • New evidence in the refractory setting • Alternative indications | 30 January 2020 |
| N04BC04/ N04BC05 G02CB01 | <p>Dopamine agonist</p> <p>Ropinarole, Pramipexole, Bromocriptine</p> | Parkinson's disease. | <p>Approved for use as add-on therapy to levodopa.</p> <p>The choice of dopamine agonists and selegiline will depend on the lowest tender price.</p> | <ul style="list-style-type: none"> • Decrease in relative cost • New safety data | 27 November 2008 |
| N05AH03 | Olanzapine, IM | Emergency management of psychotic conditions. | Not Approved | <ul style="list-style-type: none"> • New evidence of superior efficacy to suitable alternatives in patients with severe adverse reactions to FGAs | 03 December 2009 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|---------------------|--|--|--|--|-------------------|
| N05AH04 | Quetiapine | Third-line Schizophrenia. | Not Approved Amisulpride Approved for this indication. | <ul style="list-style-type: none"> Price | 15 September 2016 |
| N05AX08 | Risperidone long acting injection | Schizophrenia. | Not Approved | <ul style="list-style-type: none"> Price similar to current standard of care | 31 March 2016 |
| N05AL05 | Amisulpride | Psychosis. | Approved for use as an appropriate alternative to existing agents in patients with negative symptoms failing first and second generation antipsychotics. | <ul style="list-style-type: none"> New information suggesting adequate comparative efficacy vs. older agents such as sulpiride itself, or new safety information | 03 December 2009 |
| N05AX12 | Aripiprazole | Schizophrenia in children. | <p>Approved for use as a third-line agent in children with psychotic disorders who are intolerant to typical and atypical antipsychotic agents with:</p> <ul style="list-style-type: none"> Obesity, defined as BMI \geq 30 or age appropriate measures, or Excessive weight gain, if associated with metabolic syndrome in adherent patients on other atypical antipsychotics, not responsive to other interventions (e.g. dietary management and/or physical exercise). <p>Aripiprazole be initiated, in these cases, in consultation with or, where available, by a subspecialist (i.e. child and adolescent psychiatrist)</p> | <ul style="list-style-type: none"> New evidence of efficacy in children and adolescents | 29 November 2013 |
| N05BA12 | Alprazolam | "As required" adjunctive medication in the treatment of panic disorder. | Approved for <u>panic disorder only</u> . To be prescribed by a psychiatrist. | <ul style="list-style-type: none"> Any efficacy, safety or cost data | September 2010 |
| N05CF01/ N05CF02 | Benzodiazepine related drugs Zopiclone, Zolpidem | Short-term use for insomnia associated with a primary psychiatric condition. | Not Approved | <ul style="list-style-type: none"> If the price of z-drugs were reduced to within an acceptable distance of the price of oxazepam, consideration would be given to including these on the EML | 03 December 2009 |
| N06AX12 | Bupropion | Major depressive disorder. | <p>Approved for use as a third-line treatment of major depressive disorder and anxiety associated with depression.</p> <p>To be prescribed by a psychiatrist only.</p> | <ul style="list-style-type: none"> n/a | 27 January 2011 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|-----------------------------|---|---|--|---|------------------|
| | | | The cheapest of bupropion or venlafaxine to be used. | | |
| N06AX16 | Venlafaxine | Major depressive disorder. | Approved for use as a third-line treatment of major depressive disorder and anxiety associated with depression. To be prescribed by a psychiatrist only. The cheapest of bupropion or venlafaxine to be used. | <ul style="list-style-type: none"> New evidence of harm, or a revision in the price of bupropion to make it more economically favourable | 27 January 2011 |
| N06DX01 | Memantine | Alzheimer's Disease. | Not Approved | <ul style="list-style-type: none"> Evidence of true clinical benefit in terms of quality of life for patients and care-givers | 10 July 2008 |
| R RESPIRATORY SYSTEM | | | | | |
| R03BB04/ R03BB06 | Long acting muscarinic antagonists (LAMA) <ul style="list-style-type: none"> Tiotropium Glycopyrronium | Chronic Obstructive Pulmonary Disease (COPD). | Not Approved | Price | 14 December 2017 |
| R03DC03 | Montelukast | Chronic management of severe uncontrolled asthma. | Approved for use in: <ul style="list-style-type: none"> In adults (>12 years) with difficult to control asthma despite receiving high dose inhaled steroids and long-acting β_2 agonist, a trial of low dose sustained release theophylline should be tried before use of montelukast. If there is no response to low dose theophylline, a 2-week trial of montelukast may be used. In children between 6 and 12 years of age with severe uncontrolled asthma despite being on high dose corticosteroids and long acting β_2 agonist, a 2-week trial of montelukast could be considered. In children less than 6 years with severe uncontrolled asthma on high dose inhaled | <ul style="list-style-type: none"> Properly randomized efficacy and safety comparative studies of LTRA, low dose sustained release theophyllines and long acting beta2 agonist at all ages | 13 March 2008 |

TERTIARY AND QUATERNARY LEVEL ESSENTIAL MEDICINES RECOMMENDATIONS

| ATC CODE | MEDICINE | INDICATION | NEMLC RECOMMENDATION | REVIEW INDICATORS | DATE RATIFIED |
|-------------------------|--------------------------------|--|--|---|-------------------|
| | | | corticosteroids, a 2-week trial of montelukast could be considered. If no benefit can be demonstrated after this period, montelukast should be discontinued. | | |
| S SENSORY ORGANS | | | | | |
| S01LA04 | Ranibizumab | Sub-retinal neovascular membranes and non-resolving macular odema. | Not Approved Bevacizumab to be agent for this indication | None | 10 December 2015 |
| V VARIOUS | | | | | |
| V03AC03 | Deferasirox | Treatment of transfusional iron overload | Approved Added as an oral alternative to deferoxamine. | n/a | 15 September 2016 |
| V03AF03 | Folinic acid, intravenous | Adjuvant colorectal cancer. | Approved | n/a | 27 November 2008 |
| V03AE | Lanthanum carbonate, Sevelamer | Hyperphosphataemia in patients with chronic renal failure. | Approved – Special Access Special Access may be granted on recommendation by the PTC. | <ul style="list-style-type: none"> Evidence that the use of non-calcium-based phosphate binders significantly reduces all-cause or cardiovascular mortality and/or cardiovascular comorbidities in patients with ESRD Reduction in cost of sevelamer through price reduction or the introduction of generic equivalents | 25 June 2015 |
| V03AF01 | Mesna | Haemorrhagic cystitis post high dose cyclophosphamide/ifosfamide | Approved | n/a | 11 July 2019 |

Abbreviations:

ACTH: Adrenocorticotropic hormone
ARB: Angiotensin II receptor blocker
AR: Antiretroviral
ATAC: Arimidex, tamoxifen, alone or in combination
ATC: Anatomical Therapeutic Chemical Classification
BCG: Bacille Calmette-Guerin
BIG 1-98: Breast International Group 1-98
COCs: Combined oral contraceptives
COPD: Chronic Obstructive Pulmonary Disease
DLBCL: Diffuse large B-cell non-Hodgkins lymphoma
DMARD: Disease-modifying antirheumatic drugs
DoH: Department of Health
EML: Essential Medicine List
ESRD: End-stage renal disease
FGAs: First generation antipsychotics
FL: Follicular lymphoma
GCSF: Granulocyte colony stimulating factor
GFR: Glomerular filtration rate
GnRH: Gonadotrophin-releasing hormones
HIV: Human Immunodeficiency Virus
HR-ALL: High-risk Acute Lymphoblastic Leukaemia
IPI: International Prognostic Index
ITP: Immune Thrombocytopenic Purpura
IVF: In-vitro Fertilisation
IVIG: Intravenous Immunoglobulin
LTRA: Leukotriene receptor antagonists
mBC: Metastatic breast cancer
MRSA: Methicillin-resistant *Staphylococcus aureus*
NPH: Neutral Protamine Hagedorn
PTC: Pharmaceutical and Therapeutics Committee
RA: Rheumatoid arthritis
RCT: Randomised controlled trials
RSV: Respiratory syncytial virus
SEP: Single exit price
TEAM: Tamoxifen Exemestane Adjuvant Multinational
VCZ: Voriconazole
VTD: Bortezomib/thalidomide/corticosteroids
VHF: Viral haemorrhagic fever
WCC: White cell count

NOTE: General review indicators include, new evidence on efficacy, effectiveness or safety and significant price changes.

NEMLC ratified Summary and Review documents can be requested as required from: SAEDP@health.gov.za OR Janine.Jugathpal@health.gov.za

