EPHMRA ANATOMICAL CLASSIFICATION GUIDELINES 2017

Section B

Changed Classes/Guidelines Final Version

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A7	ANTIDIARRHOEALS, ORAL ELECTROLYTE REPLACERS AND INTESTINAL ANTI-INFLAMMATORIES	R1993
A7A	INTESTINAL ANTI-INFECTIVE ANTIDIARRHOEALS	r2017
	Includes all products containing one or more intestinal anti-infectives with or without other substances. Sulphonamides and special antibacterials such as polymyxin, neomycin, vancomycin or colistin in oral form, when mainly indicated as antidiarrhoeals are included in this group. Combinations with motility inhibitors, intestinal adsorbants and micro-organisms are also included.	
A7B	INTESTINAL ADSORBENT ANTIDIARRHOEALS	r2011
	Includes products such as kaolin and pectin. Combinations with micro-organisms are also included.	
A7C	Out of use; can be reused.	
A7D	Out of use; can be reused.	
A7 E	INFLAMMATORY BOWEL DISORDER PRODUCTS	R2017
	Includes products for inflammatory bowel disorders. Immunosuppressant products used for inflammatory bowel disorders as well as other conditions are classified in L4, for example in L4B (anti-TNF products).	
A7E1	Intestinal aminosalicylate products	I2017
	Includes products containing balsalazide, mesalazine, olsalazine, sulfasalazine and similar aminosalicylates for inflammatory bowel disorders. Products containing aminosalicylates and indicated for rheumatoid arthritis are classified in M1C.	
A7E2	Intestinal corticosteroid products	I2017
	Includes products containing corticosteroids for inflammatory bowel disorders.	
A7E9	Inflammatory bowel disorder products, other	I2017
	Includes other products for inflammatory bowel disorders. Products containing vedolizumab and indicated for inflammatory bowel disease only are classified here.	
	Products containing disodium cromoglicate and indicated for food allergy are classified here.	
A7F	ANTIDIARRHOEAL MICRO-ORGANISMS	I1993
	Includes micro-organisms such as lactobacillus acidophilus which are indicated for the treatment of diarrhoeal disease. Excluded are combinations with other antidiarrhoeals such as anti-infectives, motility inhibitors and intestinal adsorbents.	

A7G	ORAL ELECTROLYTE REPLACERS	I1993
	Oral electrolyte replacers are included in this group where diarrhoeal disease has been indicated. Intravenous preparations are included in K.	
A7H	MOTILITY INHIBITORS	I1993
	Includes narcotic derivatives such as loperamide, diphenoxylate and paregoric. Combinations with intestinal adsorbents and micro-organisms are also included.	
A7X	ALL OTHER ANTIDIARRHOEALS	I1993
	Includes all other antidiarrhoeal products.	

A9	DIGESTIVES, INCLUDING ENZYMES	r2017
A9 A	DIGESTIVES, INCLUDING ENZYMES	R1994
	Includes only those enzymes acting on the digestive tract. Combinations of dimethicone/simethicone (dimethylpolysiloxane, DMPS) with an enzyme, with or without other active substances, and specifically indicated as digestives are included in this group. Specific cholagogues are classified in A5A. Trypsin products for enzymatic wound treatment are classified in D3A and X-chymotrypsin products for ophthalmic use are classified in S1S9. Enzymes with various fields of application are classified in V3H.	

A10M	GLINIDE ANTIDIABETICS	I2009
A10M1	Glinide antidiabetics, plain	I2009
	Includes plain products containing repaglinide, nataglinide, mitiglinide, etc.	
A10M3	Glinide and biguanide antidiabetic combinations	I2009
	Includes combinations of glinide antidiabetics with biguanides.	
A10M9	Glinide antidiabetic combinations, other	I2009
	Includes combinations of glinide antidiabetics with other antidiabetics where there is no other appropriate class.	
A10N	DPP-IV INHIBITOR ANTIDIABETICS	I2009
A10N1	DPP-IV inhibitor antidiabetics, plain	I2009
	Includes plain products containing denagliptin, saxagliptin, sitagliptin, vildagliptin, etc.	
A10N3	DPP-IV inhibitor and biguanide antidiabetic combinations	I2009
	Includes combinations of DPP-IV inhibitors with biguanides.	
A10N9	DPP-IV inhibitor antidiabetic combinations, other	I2009
	Includes combinations of DPP-IV inhibitors with other antidiabetics where there is no other appropriate class. Combinations of a DPP-IV with a glitazone and a biguanide are classified in A10N9.	
A10P	SGLT2 INHIBITOR ANTIDIABETICS	R2016
A10P1	SGLT2 inhibitor antidiabetics, plain	I2016
	Includes plain products containing SGLT2 inhibitors, eg canagliflozin, dapagliflozin, empagliflozin, etc.	
A10P3	SGLT2 inhibitor and biguanide antidiabetic combinations	I2016
	Includes combinations of SGLT2 inhibitors with biguanides.	
A10P5	SGLT2 inhibitor and DPP-IV inhibitor antidiabetic combinations	I2017
	Includes combinations of SGLT2 inhibitors with DPP-IV inhibitors.	
A10P9	SGLT2 inhibitor antidiabetic combinations, other	R2017
	Includes combinations of SGLT2 inhibitors with other oral antidiabetics where there is no other appropriate class.	

A11	VITAMINS	
	Products containing vitamins which are specifically for eye conditions are classified in S1M. Multivitamins for parenteral infusion are classified in K4D (less than 100ml).	R2005
A11A	MULTIVITAMINS WITH MINERALS	r2017
	Includes products containing more than two vitamins in combination (and not specified elsewhere) with one or more minerals, eg calcium, potassium, magnesium, iron, copper, manganese and zinc etc. Potassium and magnesium aspartate are not considered as minerals (see A12 and C6X). Excluded are all oral preparations containing procaine where procaine is one of the major components (see A13A1).	
A11A1	Prenatal	R1993
	Includes those products specifically indicated for vitamin supplementation during pregnancy or lactation (eg containing fluoride as mineral).	
A11A2	Paediatric	
	Includes products with halibut liver oil or vitamin D which are indicated only for paediatric conditions. Products with malt extracts are classified in A13A.	
A11A3	Geriatric	
	Includes vitamin preparations with hormones for geriatric patients. The term "ger" often forms part of the name of products in this group (see also A14A2).	
A11A4	Other multivitamins with minerals	
	Includes all other multivitamin products not specified in A11A1, A11A2 or A11A3. Calcium-containing products promoted for osteoporosis or calcium deficiency are classified in A12A. Vitamin C combinations, eg promoted for hypovitaminose C, are classified in A11G2. When in doubt the calcium component takes precedence over the other ingredients. Products based on lecithin or glutamic acid used as tonics are classified in A13A.	

A12	MINERAL SUPPLEMENTS	
A12A	CALCIUM PRODUCTS	r2016
	Includes single and combination products promoted for osteoporosis or calcium deficiency, even when indicated for other diseases as well (see A11G2 and A11A4). See also M5B.	
	Products containing both calcium and magnesium to treat deficiency of these minerals are classified here.	
	Products containing calcium and indicated for both hyperphosphataemia and calcium deficiency are classified in V3G2.	
A12B	POTASSIUM PRODUCTS	
	Potassium diuretic combinations are classified in C3 (see note under A12C regarding potassium aspartate).	
A12C	OTHER MINERAL SUPPLEMENTS	r2017
	Includes magnesium and/or fluoride products used as alimentary supplements. Potassium and magnesium aspartate are usually indicated in the treatment of cardiac disease and should be classified in C6X. In certain cases, however, when these compounds are indicated as mineral supplements, they should be classified in A12.	
	Products containing both calcium and magnesium to treat deficiency of these minerals are classified in A12A.	
A12C1	Magnesium supplements	R1993
A12C2	Other mineral supplements	

В	BLOOD AND BLOOD FORMING ORGANS	
B1	ANTITHROMBOTIC AGENTS	R1994
B1A	VITAMIN K ANTAGONISTS	R2004
	Includes coumarin and indanedione derivatives.	
B1B	HEPARINS	R2004
B1B1	Unfractionated heparins	
	Includes injectable high molecular weight (unfractionated) heparin (pure and in combination with other substances) with an average molecular weight from 5000 up to 30000 Dalton. The molecules are unfractionated.	
B1B2	Fractionated heparins	R2003
	Includes injectable low molecular weight (fractionated) heparin (pure and in combination with other substances) with an average molecular weight from 2000 up to 18000 Dalton. The molecules are fractionated (fragments). Included are, eg bemiparin, enoxaparin, tedelparin and tinzaparin.	
B1B3	Heparins for flushing	
	Includes heparin products for use with catheters eg Hepflush, Heplock.	
B1B9	Other heparins	R2004
B1C	PLATELET AGGREGATION INHIBITORS	r2017
	Includes all products claiming platelet aggregation inhibition as the main indication eg ticlopidine. Also included are those products which have specific packs or presentations which are mainly indicated for platelet aggregation inhibition. These products, such as sulphinpyrazone, ditazole, dipyridamole, aspirin and non-steroidal anti-inflammatories are also prescribed for other conditions.	
B1C1	Cyclo-oxygenase inhibitor platelet aggregation inhibitors	R2010
	Includes specific presentations of eg acetylsalicylic acid (aspirin), indobufen, picotamide, sulfinpyrazone, which are mainly indicated for platelet aggregation inhibition.	
	All oral solid low-dose aspirin products (162mg and below) are classified in B1C1 worldwide.	

B1C2	ADP (adenosine diphosphate) receptor antagonist platelet aggregation inhibitors	I2000
	Includes clopidogrel and ticlopidine.	
D162		12000
B1C3	GP IIb/IIIa (glycoprotein) antagonist platelet aggregation inhibitors	I2000
	Includes abciximab, eptifibatide and tirofiban.	
B1C4	Platelet cAMP enhancing platelet aggregation inhibitors	R2017
	Includes prostacyclin derivatives eg beraprost, iloprost, limaprost and also phosphodiesterase (PDE) inhibitors eg anagrelide, dipyridamole when mainly indicated for platelet aggregation inhibition. Products containing epoprostenol are classified in C6B3. Products containing prostacyclin derivatives and only indicated for PAH are classified in C6B3. Products containing prostacyclin derivatives and indicated for both PAH and other conditions are classified here.	
B1C5	Platelet aggregation inhibitors, combinations	R2004
	Includes combinations of two of more platelet aggregation inhibitors, eg a cyclo-oxygenase inhibitor with an ADP receptor antagonist, or a cyclo-oxygenase inhibitor with a PDE inhibitor.	
	Products containing a combination of a platelet aggregation inhibitor together with another substance and for use as antithrombotics are classified here.	
B1C9	Other platelet aggregation inhibitors	r2015
	Includes eicosapentanoic acid, nizofenone, ozagrel, vorapaxar.	
B1D	FIBRINOLYTICS	R2004
	Includes endogenous proteins (eg urokinase), exogenous proteins (eg streptokinase) as well as ancrod, plasmin, plasminogen, tissue plasminogen activator (TPA), an anisoylated plasminogen-streptokinase activator complex (APSAC) and pro-urokinase (a precursor form of urokinase).	
B1E	DIRECT THROMBIN INHIBITORS	I2004
	Includes argatroban, bivalirudin, desirudin, lepirudin, melagatran, ximelagatran.	
B1F	DIRECT FACTOR XA INHIBITORS	I2013
	Includes products containing direct factor Xa inhibitors, eg apixaban, edoxaban, rivaroxaban.	
B1X	OTHER ANTITHROMBOTIC AGENTS	I2004
	Includes danaparoid, dermatan sulphate, activated protein C (drotrecogin alpha, activated), fondaparinux, <i>Ligustrum lucidum</i> , pentosan polysulphate sodium,	

poloxalkol, protein C.	

C	CARDIOVASCULAR SYSTEM	
C1	CARDIAC THERAPY	
C1A	CARDIAC GLYCOSIDES AND COMBINATIONS	
C1A1	Plain cardiac glycosides	r2017
	This group includes all plain cardiac glycosides, either clearly defined chemical entities or standardised plant extracts and combinations of all the aforementioned. Non-standardised plant extracts are classified in C6X.	
C1A2	Cardiac glycoside combinations	r2008
	Excludes combinations with beta-blocking agents (C7B2), calcium antagonists (C8B3), ACE inhibitors (C9B9) and angiotensin-II antagonists (C9D9).	
C1B	ANTI-ARRHYTHMICS	R1999
	This group includes all products which are recommended for use in arrhythmia, disorders of cardiac rhythm and tachycardia, eg ajmaline, quinine, quinidine, procainamide, sparteine, amiodarone or similar, but only when specified as anti-arrhythmics alone. Excludes beta-blocking agents (C7) and calcium antagonists (C8).	
C1C	CARDIAC STIMULANTS EXCLUDING CARDIAC GLYCOSIDES	R1994
	This group includes products for the indication hypotension, chiefly sympathomimetic agents eg amezinium methylsulphate used in the treatment of hypotension, but excluding sympathomimetics with predominant bronchodilatory effects used in the treatment of asthma and similar conditions (see R3).	
C1C1	Cardiac stimulants excluding dopaminergic agents	R2003
	Includes plain caffeine. Includes adrenaline/epinephrine products used for anaphylactic shock. Adrenaline combinations with antihistamines are classified here.	
C1C2	Cardiac dopaminergic agents	R1997
	Includes dobutamine, docarpamine, dopamine and ibopamine.	

C6	OTHER CARDIOVASCULAR PRODUCTS	R2017
C6A	Out of use; can be reused from 2020	D2017
С6В	PULMONARY ARTERIAL HYPERTENSION (PAH) PRODUCTS	I2017
C6B1	Endothelin receptor antagonist PAH products	I2017
	Includes products for pulmonary arterial hypertension (PAH) containing endothelin receptor antagonists such as ambrisentan, bosentan, macitentan, sitaxentan, etc.	
C6B2	PDE5 inhibitor PAH products	I2017
	Products containing PDE5 inhibitors and indicated only for pulmonary arterial hypertension (PAH) are classified here. Products containing PDE5 inhibitors and indicated for both erectile dysfunction and PAH are classified in G4E1.	
C6B3	Prostacyclin agonist PAH products	I2017
	Products containing prostacyclin agonists (eg iloprost, selexipag, treprostinil) and indicated for pulmonary hypertension only, are classified here. Products containing epoprostenol are all classified here. Products containing prostacyclin agonists and indicated for platelet aggregation inhibition are classified in B1C4. Products containing prostacyclin agonists for PAH and other conditions are classified in B1C4.	
C6B9	Pulmonary arterial hypertension (PAH) products, other	I2017
	Includes other products for PAH, eg those containing soluble guanylate synthase stimulators such as riociguat.	
C6X	OTHER CARDIOVASCULAR PRODUCTS	I2017
	This group includes all other products that are mainly recommended for diseases of the cardiovascular system and that cannot be classified in groups C1-C5 or C7-11.	
	Potassium and magnesium aspartate are usually classified here. In certain cases when these compounds are indicated as mineral supplements, they are classified in A12.	
	Products containing icatibant for hereditary angioedema are classified in B6D.	

NONSTEROIDAL PRODUCTS FOR INFLAMMATORY SKIN **D5** r2009 **DISORDERS** Includes products for psoriasis, hyperkeratosis, ichthyosis, eczema, dermatitis, seborrhoea. Psoralens are classified here when used for inflammatory conditions. Excluded from this class are combinations with antibacterials (D6A), antifungals (D1A) and products specifically indicated in acne (D10A). Combinations with corticosteroids, if not specifically indicated for psoriasis, are classified in D7B. Sulphur baths which contain other substances besides sulphur and are not used for dermatological purposes, are classified in M2A. D5A TOPICAL ANTIPSORIASIS PRODUCTS R2005 Includes products, containing substances such as tar, coal tar, ichthammol, dithranol, psoralens, for the treatment of psoriasis. These products may also be for other inflammatory skin conditions. Products containing corticosteroids in combination with coal tar for psoriasis are classified here. Includes products consisting of coal tar or calcipotriol, alone or in combination, when indicated for psoriasis. D₅B r2017 SYSTEMIC ANTIPSORIASIS PRODUCTS Includes products for the treatment of psoriasis. These products may also be for other inflammatory skin conditions. Products containing secukinumab or ustekinumab and indicated for psoriasis and also other conditions, eg psoriatic arthritis, are classified in L4C. D5X OTHER NONSTEROIDAL PRODUCTS FOR INFLAMMATORY SKIN r2016 **DISORDERS** Includes nonsteroidal products for inflammatory skin disorders which are not indicated for psoriasis. Specific topical immunomodulators for dermatitis are classified here.

Products containing ingenol mebutate or diclofenac gel that are indicated for

actinic keratosis are classified here.

ANTI-ACNE PREPARATIONS	
TOPICAL ANTI-ACNE PREPARATIONS	r2009
Includes all topical dermatological preparations indicated for the treatment of acne or rosacea which may contain corticosteroids, antibacterials, etc.	
Also includes soaps and shampoos which are specifically indicated for the treatment of acne.	
ORAL ANTI-ACNE PREPARATIONS	r2017
Includes special hormonal preparations indicated exclusively for the treatment of acne, and also antibacterials and other products indicated for the exclusive treatment of acne. Products that are indicated for both oral contraception and acne are classified in G3A.	
	TOPICAL ANTI-ACNE PREPARATIONS Includes all topical dermatological preparations indicated for the treatment of acne or rosacea which may contain corticosteroids, antibacterials, etc. Also includes soaps and shampoos which are specifically indicated for the treatment of acne. ORAL ANTI-ACNE PREPARATIONS Includes special hormonal preparations indicated exclusively for the treatment of acne, and also antibacterials and other products indicated for the exclusive treatment of acne. Products that are indicated for both oral contraception and acne

G3	SEX HORMONES AND PRODUCTS WITH SIMILAR DESIRED EFFECTS, SYSTEMIC ACTION ONLY	
	Sex hormones used as cytostatics must be classified in L2.	
CZA		201 <i>7</i>
G3A	HORMONAL CONTRACEPTIVES, SYSTEMIC	r2017
	Contraceptive transdermal patches are classified in G3A9.	
	Products that are indicated for both oral contraception and acne are classified in G3A.	
G3A1	Monophasic preparations with < 50 mcg oestrogen	I1994
G3A2	Monophasic preparations with > = 50 mcg oestrogen	I1994
G3A3	Biphasic preparations	I1994
G3A4	Triphasic preparations	r2011
	Quadriphasic products are included in G3A4.	
G3A5	Progestogen-only preparations, oral	I1994
	Includes packs indicated for hormonal contraception only.	
G3A6	Emergency contraceptives, systemic	I2015
	Includes products containing eg levonorgestrel, mifepristone (10-25mg), ulipristal, when indicated for post-coital emergency contraception only.	
	Products containing mifepristone and indicated as abortifacients alone, or with other indications, are classified in G3X. Products containing ulipristal and indicated for uterine fibroids are classified in G3X.	
G3A9	Other hormonal contraceptives, systemic	r2015
	Includes injectable products (eg Depo Provera when used as a contraceptive), implants (eg Norplant), vaginal rings containing hormones, and IUDs containing hormones. Contraceptive transdermal patches are classified here.	
	Products for emergency contraception only are classified in G3A6. Products containing mifepristone are classified in G3A6 if indicated for emergency contraception and in G3X if indicated as abortifacients alone or with other indications.	
	Quadriphasic products are included in G3A4.	
G3B	ANDROGENS, EXCLUDING G3E, G3F	R1997

G4E	ERECTILE DYSFUNCTION PRODUCTS	r2015
	Includes products for the treatment of male impotence.	
G4E1	Erectile dysfunction products, PDE5 inhibitors	r2017
	Includes products containing PDE5 inhibitors, eg avanafil, mirodenafil, sildenafil, tadalafil, udenafil, vardenafil, etc, when indicated for the treatment of erectile dysfunction.	
	Products containing sildenafil (oral 20mg) or tadalafil and indicated for pulmonary arterial hypertension (PAH) only are classified in C6B2. Products containing tadalafil and indicated for both erectile dysfunction and PAH are classified here.	
	Products indicated for erectile dysfunction that contain a PDE5 inhibitor in combination with other substances are classified here.	
	Products containing a PDE5 inhibitor in combination with other substances, and indicated for erectile dysfunction as well as other conditions, are classified here.	
G4E9	Erectile dysfunction products, others	I2015
	Includes products containing eg alprostadil, apomorphine, etc when indicated for the treatment of erectile dysfunction. In addition, includes products that contain substances of natural origin for erectile dysfunction.	
	Products that do not contain a PDE5 inhibitor and are indicated for erectile dysfunction, together with other urological conditions, are classified here.	
G4X	ALL OTHER UROLOGICAL PRODUCTS	r2015
	Includes products containing local anaesthetics used specifically for premature ejaculation.	
	Products for erectile dysfunction are classified in G4E. Products for both erectile dysfunction and other urological conditions are also classified in G4E. Products for improving general sexual performance (not specifically erectile dysfunction) are classified here.	

H2	SYSTEMIC CORTICOSTEROIDS	
H2A	SYSTEMIC CORTICOSTEROIDS, PLAIN	
	Includes all systemic products containing one or more corticosteroid(s) and no other active ingredient, with or without lignocaine.	
H2A1	Injectable corticosteroids, plain	R1993
H2A2	Oral corticosteroids, plain	R1993
H2A3	Other systemic corticosteroids, plain	r2017
	Includes suppositories. Corticosteroids to treat inflammatory intestinal disorders are classified in A7E2.	
H2B	SYSTEMIC CORTICOSTEROID COMBINATIONS	r2017
	Systemic products containing one or more corticosteroid(s) and one or more other active ingredient(s) (eg antihistamine). Also includes extracts containing natural corticosteroids, but excluding products classified in the following groups:	
	A7E2 – Intestinal anti-inflammatory agents	
	H4X – Liver extracts with small doses of corticosteroids (mainly in Italy).	
	G3X - Gland extracts (mammary, placenta, etc) and corticoid extracts mainly indicated for sexual disorders.	
	M1B - Corticosteroids with anti-inflammatory agents, analgesics, muscle relaxants, etc.	
	R1B – Systemic nasal preparations	
	R3D, R3F, R3L2 - Anti-asthmatic inhalants acting topically on the bronchioles.	

J	GENERAL ANTI-INFECTIVES SYSTEMIC	R2006
	Systemic anti-infectives for the treatment of stomatological conditions are classified in J.	
J1	SYSTEMIC ANTIBACTERIALS	r2017
	The need for a systematic approach to classifying combination products (ie those containing two or more different antibacterials) has led to the adoption of a hierarchical system with a J1A (tetracycline) ingredient taking precedence over a J1B (chloramphenicol), J1B over J1C, etc, with the exception of combinations of products in J1K-P, J1X with other antibacterials, in which case the products in J1K-P, J1X should take precedence. Within J1K-P, J1X the same hierarchical system is used, ie a J1K ingredient takes precedence over J1L, J1L over J1M, etc.	
	Antibacterials indicated only for bacterial intestinal infections are classified in A7A.	
J1A	TETRACYCLINES AND COMBINATIONS	R1997
	Includes all systemic preparations with a tetracycline, plain or in combination with other anti-infectives, except in combination with a product in J1K-P, J1X or a sulphonamide (J3A).	
J1B	CHLORAMPHENICOL AND COMBINATIONS	R1997
	Includes all systemic preparations with chloramphenicol, plain or in combination with other anti-infectives, except in combination with tetracyclines (J1A), products in J1K-P, J1X and sulphonamides (J3A).	
J1C	BROAD SPECTRUM PENICILLINS	r2009
	Includes all systemic penicillin derivatives which are used as broad spectrum antibacterials, plain or in combination with other anti-infectives except in combination with tetracyclines (J1A), chloramphenicols (J1B), products in J1K-P, J1X and sulphonamides (J3A). Combinations with fosfomycin should, however, be included in this class. Thus J1C includes amoxycillin, ampicillin, esters and derivatives of ampicillin such as azlocillin, epicillin, hetacillin, metampicillin, pivampicillin, talampicillin, bacampicillin and ciclacillin. Azidocillin should be classified in J1H and carbenicillin and similar in J1L.	
J1C1	Oral broad spectrum penicillins	
	Also included are suppository presentations.	
J1C2	Injectable broad spectrum penicillins	

J1X	OTHER ANTIBACTERIALS	R2006
	Includes all other systemic antibacterials which do not fit into J1A-J1P or J3A. Combinations with products in J1K, J1L, J1M, J1P, and J3A are classified in these groups respectively.	
J1X1	Glycopeptide antibacterials	r2017
	Includes teicoplanin, vancomycin. Products containing vancomycin (oral forms) for intestinal infections are classified in A7A.	
J1X2	Polymyxins	I1994
	Includes colistin, polymyxin. These substances, if mainly indicated as antidiarrhoeals, are classified in A7A.	
J1X9	All other antibacterials	R2007
	Includes all systemic antibacterials which do not fit into J1A-J1X2, eg daptomycin, fosfomycin, fusidic acid, novobiocin, plain sulbactam, pristinamycin, spectinomycin, and tigecycline Formulations of fosfomycin with broad spectrum penicillins are in J1C and formulations with cephalosporins are in J1D.	

L	ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS	R1994
L1	ANTINEOPLASTICS	R2003
	Includes all preparations mainly indicated for the treatment of cancers and all packs specifically produced for use in anticancer therapy eg special anticancer packs of antibiotics.	
L1A	ALKYLATING AGENTS	R2003
	Includes nitrogen mustard analogues (eg chlorambucil, chlormethine, cyclophosphamide, ifosfamide, melphalan, prednimustine, trofosfamide), ethylene imines (eg altretamine (hexamethylmelamine), carboquone, thiotepa, triaziquone), nitrosoureas (eg bendamustine, carmustine, fotemustine, lomustine, semustine, streptozocin), alkyl sulfonates (eg busulfan, mannosulfan, mitolactol, treosulfan), triazenes and analogues. Dacarbazine is classified in this group.	
L1B	ANTIMETABOLITES	r2016
	Includes folic acid analogues (eg methotrexate), pyrimidine analogues (eg capecitabine, carmofur, cytarabine, fluorouracil, tegafur) and purine analogues (eg fludarabine, mercaptopurine, tioguanine).	
	Methotrexate can also be classified in M1C for rheumatic conditions or in D for dermatological conditions.	
	Products containing topical fluorouracil for actinic keratosis are classified here.	
L1C	PLANT-BASED ANTINEOPLASTICS	R2016
	Includes products that contain plant-derived alkaloids, terpenes, lignans etc, or their derivatives/analogues.	
	Combination products containing substances from two fourth level classes of L1C are classified in the higher level class, eg a combination of a camptothecin with a podophyllotoxin is classified in L1C3.	
L1C1	Vinca alkaloid antineoplastics	I2016
	Includes products containing alkaloids (or their derivatives/analogues) that are derived from <i>Cantharanthus roseus</i> (Madagascan periwinkle), eg vinblastine, vincristine, vindesine, vinflunine, vinorelbine, etc.	
L1C2	Taxane antineoplastics	I2016
	Includes products containing diterpenes (or their derivatives/analogues) that are derived from species of <i>Taxus</i> (yew), eg cabazitaxel, docetaxel, paclitaxel, etc.	

L1C3	Camptothecin antineoplastics	I2016
	Includes products containing alkaloids (or their derivatives/analogues) derived from <i>Camptotheca acuminata</i> (happy tree), eg hydroxycamptothecin, irinotecan, topotecan, etc.	
L1C4	Podophyllotoxin antineoplastics	I2106
	Includes products containing lignans (or their derivatives/analogues) derived from <i>Podophyllum</i> (May apple) species, eg etoposide, mitopodozide, teniposide, etc.	
L1C9	Plant-based antineoplastics, other	I2016
	Includes antineoplastic products containing other plant chemicals (or their derivatives/analogues), eg colchicine derivatives such as demecolcine.	
	Products for cancer containing omacetaxine mepisuccinate are classified here. Products for cancer containing <i>Brucea javanica</i> are classified here.	
	Antineoplastic products that contain dried plant material or unrefined plant extracts are classified in L1X9.	
	Antineoplastic products that are derived from natural sources other than plants, eg from bacteria or fungi, are classified elsewhere.	
L1D	ANTINEOPLASTIC ANTIBIOTICS	r2017
	Includes eg aclarubicin, bleomycin, dactinomycin, daunorubicin, doxorubicin, epirubicin, gemtuzumab ozogamicin, idarubicin, mitomycin, mithramycin, mitoxantrone, plicamycin, zorubicin.	
	Products containing mitoxantrone and indicated for both cancer and multiple sclerosis are classified here.	
L1F	PLATINUM ANTINEOPLASTICS	I2014
	Includes products containing eg carboplatin, cisplatin, oxaliplatin.	

L1G	MONOCLONAL ANTIBODY ANTINEOPLASTICS	r2017
	Includes products containing monoclonal antibodies for neoplasms eg alemtuzumab, bevacizumab, cetuximab, edrecolomab, ibritumomab, rituximab, trastuzumab.	
	Products containing alemtuzumab and indicated for cancer only are classified here. Products containing alemtuzumab and indicated for multiple sclerosis are classified in N7A.	
	Gemtuzumab ozogamicin is classified in L1D. Antineoplastic monoclonal antibodies against protein kinases are classified here and not in L1H.	
L1H	PROTEIN KINASE INHIBITOR ANTINEOPLASTICS	r2015
	Includes protein kinase inhibitors for neoplasms, eg axitinib, crizotinib, dasatinib, erlotinib, everolimus, gefitinib, imatinib, lapatinib, nilotinib, pazopanib, regorafenib, ruxolitinib, sorafenib, sunitinib, temsirolimus, vandetanib, vemurafenib.	
	Antineoplastic monoclonal antibodies against protein kinases are classified in L1G.	
L1X	ALL OTHER ANTINEOPLASTICS	R2003
L1X1	Adjuvant preparations for cancer therapy	R2003
	Includes products derived from Viscum (mistletoe).	
L1X2	Out of use	D2014
L1X3	Out of use	D2014
L1X4	Out of use	D2014
L1X9	All other antineoplastics	r2016
	Includes amsacrine, enzymes, estramustine, gallium nitrate, methylhydralazine, mitotane, procarbazine, substituted urea, tasonermin. Also includes celecoxib for familial adenomatous polyposis (FAP).	
	Products containing brentuximab vedotin, and for cancer, are classified here.	
	Products containing aminolaevulinic acid for actinic keratosis, basal cell carcinoma or Bowen syndrome are classified here.	

L3	IMMUNOSTIMULATING AGENTS	I1994
L3A	IMMUNOSTIMULATING AGENTS EXCLUDING INTERFERONS	R2004
L3A1	Colony-stimulating factors	I2004
	Includes ancestim, filgrastim, lenograstim, molgramostim, pegfilgrastim, sargramostim.	
L3A9	All other immunostimulating agents excluding interferons	r2016
	Includes cridanimod, glatiramer acetate, interleukin-2, picibanil.	
	BCG vaccine, <i>Corynebacterium parvum</i> , and levamisole are classified here when used as immunostimulants.	
L3B	INTERFERONS	r2009
	Combinations of interferons with ribavirin indicated only for viral hepatitis are classified in J5B1.	
L3B1	Interferons, alpha	I1994
L3B2	Interferons, beta	R2017
	Products containing beta interferons and indicated for multiple sclerosis only are classified in N7A. Products containing beta interferons and indicated for both multiple sclerosis and other conditions are classified here.	
L3B3	Interferons, gamma	I1994
L3B9	Interferons, non-specified	I1994

L4	IMMUNOSUPPRESSANTS	R2010
L4A	Out of use; can be reused from 2013	D2010
L4B	ANTI-TNF PRODUCTS	r2015
	Products containing anti-TNF substances are classified here, eg adalimumab, afelimomab, certolizumab pegol, etanercept, golimumab, infliximab. These products can be indicated for multiple conditions, eg rheumatoid arthritis, Crohn's disease, psoriasis.	
	Products containing apremilast for arthritic conditions are classified in M1C.	
L4C	INTERLEUKIN INHIBITORS	r2017
	Includes products containing interleukin inhibitors, eg basiliximab, canakinumab, daclizumab, rilonacept.	
	Includes interleukin inhibitors indicated for the treatment of rejection in organ transplants and for auto-inflammatory diseases such as CAPS (cryopyrin-associated periodic syndromes).	
	Products containing tocilizumab or anakinra and indicated for arthritic conditions are classified in M1C. Products containing secukinumab or ustekinumab and indicated for psoriasis and also other conditions, eg psoriatic arthritis, are classified here.	
	Products containing daclizumab and indicated for use in kidney transplantation are classified here. Products containing daclizumab and indicated for multiple sclerosis and other conditions are classified in N7A.	
L4X	OTHER IMMUNOSUPPRESSANTS	r2017
	Immunosuppressants used in the treatment of rejection in organ transplants are classified here, or in L4C if they contain interleukin inhibitors.	
	Includes eg antilymphocyte and antithymocyte immunoglobulins, azathioprine, cyclosporin, muromonab-cd3, mycophenolate mofetil, tacrolimus — unless classified elsewhere because of a specific indication or formulation. For example, ophthalmic cyclosporin for dry eye is classified in S1K9 and dermatological tacrolimus is classified in D5X.	
	Products for multiple sclerosis are classified in N7A.	
	Products containing natalizumab and indicated for multiple sclerosis and other conditions are classified in N7A.	
	Products containing apremilast are classified here.	
	Corticosteroids are not classified here.	

M1C | SPECIFIC ANTI-RHEUMATIC AGENTS

r2017

This class includes abatacept, anakinra, tocilizumab, gold preparations, bucillamine, penicillamine and quinolines (eg oxycinchophen). Includes products containing mesalazine, olsalazine, and sulphasalazine if specifically indicated for rheumatic conditions. Products containing aminosalicylates and used for intestinal inflammatory conditions, are classified in A7E1.

Azathioprine is in L4X. Products containing methotrexate for rheumatic conditions are classified here; otherwise methotrexate is classified in LIB or in D.

Products containing anti-TNF substances are classified in L4B.

Products containing tofacitinib, and indicated for rheumatoid arthritis, are classified here.

Products containing interleukin inhibitors and only indicated for arthritic conditions are classified here, eg tocilizumab, anakinra. Interleukin inhibitors indicated for multiple conditions including arthritis are classified in L4C.

Products containing apremilast are classified in L4X.

N2	ANALGESICS	R2003
	Only includes general purpose analgesics with multiple indications and uses. Thus products specifically used for rheumatic disorders are classified in group M, analgesic cold preparations are classified in R5, products specifically for dysmennorrhoea are classified in G2X.	
N2A	NARCOTICS	R1993
	Includes all analgesics classified as narcotics in accordance with the legal definition of narcotic analgesics in each country.	
N2B	NON-NARCOTICS AND ANTI-PYRETICS	r2017
	Includes systemic products for non-specific analgesia except those classified in N2A (narcotics), N2C (specific anti-migraine preparations), R5A (analgesic/antihistamine cold preparations) and G2X1 (specific dysmenorrhoea preparations).	
	Topical products for analgesia are classified in M2A. Products containing acetylsalicylic acid only are classified in N2B, not M1A. Products containing low-dose oral solid acetylsalicylic acid (162mg and below) are classified in B1C1 (platelet aggregation inhibition).	
	Products containing non-steroidal anti-inflammatories and for both musculoskeletal conditions and analgesia are classified in M1A.	
	Alka-Seltzer, when it contains an analgesic, is classified in N2B. Otherwise, it is classified in A2A1.	
	Products containing muscle relaxants in combination with analgesics are classified in M3.	
	4th level used in Austria, Finland, Hungary, Germany, South Africa, Sweden and Switzerland only.	
N2B1	Prescription-bound non-narcotics and anti-pyretics	
N2B2	Non-prescription-bound non-narcotics and anti-pyretics	
N2C	ANTI-MIGRAINE PREPARATIONS	
N2C1	Antimigraine triptans	I2001
	These are selective 5HT1 receptor agonists eg almotriptan, eletriptan, frovatriptan, naratriptan, rizatriptan, sumatriptan, zolmitriptan.	
N2C9	All other anti-migraine preparations	r2015
	Includes products containing indoramin alone if indicated for migraine.	

N7	OTHER CNS DRUGS	R1996
N7A	MULTIPLE SCLEROSIS PRODUCTS	I2017
	Products containing alemtuzumab, dimethyl fumarate, fingolimod, glatiramer acetate, laquinimod, teriflunomide, etc, and indicated for multiple sclerosis only, are classified here.	
	Products containing natalizumab and indicated for multiple sclerosis and other conditions are classified here.	
	Products containing alemtuzumab and indicated for cancer only, are classified in L1G.	
	Products containing daclizumab and indicated for multiple sclerosis and also other conditions are classified here. Products containing daclizumab for use in kidney transplantation only are classified in L4C.	
	Products containing beta interferons and indicated for multiple sclerosis only are classified here. Products containing beta interferons and indicated for both multiple sclerosis and other conditions are classified in L3B2.	
	Products containing mitoxantrone and indicated for both cancer and multiple sclerosis are classified in L1D.	
	Products containing fampridine for improvement in walking in multiple sclerosis are classified in N7X.	
	Products containing other substances, eg corticosteroids, immunosuppressants such as azathioprine, that have multiple uses, are classified elsewhere.	
N7B	ANTISMOKING PRODUCTS	
	Includes products used to stop smoking.	
N7C	ANTIVERTIGO PRODUCTS	I1996
	Includes betahistine, cinnarizine and flunarizine when indicated for vertigo and Meniere's disease.	
N7D	ANTI-ALZHEIMER PRODUCTS	I1998
N7D1	Anti-Alzheimer products, cholinesterase inhibitors	R2003
	Includes eg donepezil, galantamine, rivastigmine and tacrine.	
N7D9	All other anti-Alzheimer products	I1998
	Includes all other products specifically used for Alzheimer's disease.	
N7E	DRUGS USED IN ALCOHOL DEPENDENCE	R2002

	Includes acamprosate, calcium carbimide, disulfiram. Naltrexone when used in alcohol dependence is classified here.	
N7F	DRUGS USED IN OPIOID DEPENDENCE	R2002
	Includes naltrexone, except when used in alcohol dependence (use N7E).	
N7X	ALL OTHER CNS DRUGS	R2017
	Includes parasympathetic agents. Benzodiazepine antagonists such as flumazenil are classified here. Atomoxetine is included in the class. Products containing gabapentin or pregabalin are classified in N3A if indicated for both neuropathic pain and epilepsy.	
	Products containing pilocarpine and indicated for both dry mouth and dry eye are classified here.	
	Products indicated for multiple sclerosis are classified in N7A. Products containing fampridine for improvement in walking in multiple sclerosis are classified here.	

R2	THROAT PREPARATIONS	
R2A	THROAT PREPARATIONS	r2017
	All preparations formulated for infections of the throat, nose/throat and mouth/throat, such as tablets, lozenges, pastilles, drops, sprays, gargles and suppository forms (eg with bismuth, povidone-iodine).	
	Lozenges with broncholytic or cough-relieving effects are classified in R5F unless they contain anti-infectives (R5B), expectorants (R5C) or antitussives (R5D).	

S1F	MYDRIATICS AND CYCLOPLEGICS	
	Includes parasympathicolytics (atropine, cyclopentolate, homatropine, scopolamine, tropicamide) and sympathomimetics (phenylephrine, tyramine) in concentration of 2% or more.	
S1G	OCULAR ANTI-ALLERGICS, DECONGESTANTS, ANTISEPTICS	r2017
	Combination products containing substances from more than one subgroup of S1G are classified according to the hierarchical principle. For example, a product containing an antihistamine together with a sympathomimetic, is classified in S1G1, rather than S1G5.	
	Combination products containing substances from one or more of the subgroups of S1G, together with eye vitamins or similar substances, are classified in the appropriate S1G subclass.	
	Ophthalmic non-steroidal anti-inflammatories are classified in S1R. Products containing non-steroidal anti-inflammatories in combination with anti-allergics and/or antihistamines are classified in the appropriate S1G subclass.	
S1G1	Ocular anti-allergics, antihistamines	R2005
	Includes antazoline, chlorphenamine, emedastine, epinastine, levocabastine.	
S1G2	Ocular anti-allergics, mast cell stabilisers	I2004
	Includes acitazanolast, cromoglicic acid, ibudilast, nedocromil, lodoxamide, pemirolast, tranilast.	
S1G3	Ocular anti-allergics, multiple action	r2014
	Includes antihistamines which also have a mast cell stabilisation action, eg alcaftadine, azelastine, ketotifen, olopatadine.	
S1G5	Ocular decongestants, sympathomimetics	I2004
	Includes naphazoline, phenylephrine, tetryzoline.	
S1G6	Ocular antiseptics	I2004
	Includes benzalkonium chloride, bibrocathol, boric acid, chlorbutanol, chlorhexidine, edetic acid, ethacridine, mercury salts, povidone, salicylic acid, sodium proprionate.	
S1G9	Other similar ocular products	I2004
	Includes salts of bismuth, silver and zinc.	
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S1H	OPHTHALMOLOGICAL LOCAL ANAESTHETICS	
	Includes cocaine, oxybuprocaine, proxymetacaine and tetracaine.	
S1J	Out of use; can be reused from 2009	D2006
S1K	DRY EYE PRODUCTS	R2016
S1K1	Artificial tears and ocular lubricants	I2016
	Includes products containing substances that are used to replace the moisturising action of natural tears.	
S1K9	Dry eye products, other	I2016
	Includes products containing eg, ciclosporin, diquafosol, rebamipide, when indicated for dry eye. These substances can act in various ways to improve the availability of tears, eg to increase tear production, or to manage inflammation arising from dry eye.	
	Products containing rebamipide for gastric mucosal protection are classified in A2B9.	
S1L	PREPARATIONS FOR USE WITH CONTACT LENSES	R2001
	Includes products for cleaning, disinfecting and deproteinising contact lenses.	
S1M	EYE TONICS AND EYE VITAMINS	r2011
	Preparations which claim to improve asthenopia and weakness of accommodation or which are for 'tired eyes'. Vitamin products specifically for eye conditions are classified here.	
	Combination products containing substances from one or more of the subgroups of S1G, together with eye vitamins or similar substances, are classified in the appropriate S1G subclass.	
	Ocular forms of products containing only vitamin A are classified here.	
S1N	PREPARATIONS TO PREVENT CATARACT AND ANTICATARACTOGENICS	R2003
	Preparations which claim to prevent cataracts or improve vision in early cataract formation.	
S1N1	Preparations to prevent cataract and anticataractogenics, systemic	R1993
S1N2	Preparations to prevent cataract and anticataractogenics, topical	R1993

S1P	OCULAR ANTINEOVASCULARISATION PRODUCTS	r2009
	Includes products indicated specifically for the treatment of wet age-related macular degeneration (AMD) and other ocular conditions where neovascularisation is believed to play a role. Includes anecortave, pegaptanib, ranibizumab, rostaporfin, and verteporfin. Vitamins promoted to prevent AMD are classified in S1M.	
S1Q	Out of use; can be reused	
S1R	OPHTHALMIC NON-STEROIDAL ANTI-INFLAMMATORIES	r2017
	Includes non-steroidal anti-inflammatory products for specific ophthalmological conditions. For example, bendazac, diclofenac, flurbiprofen, indomethacin, oxyphenbutazone, piroxicam, pranoprofen, suprofen.	
	Products containing non-steroidal anti-inflammatories in combination with anti-allergics and/or antihistamines are classified in the appropriate S1G subclass.	
S1S	OPHTHALMOLOGICAL SURGICAL AIDS	R2003
	This group comprises drugs used during ophthalmological surgery.	
S1S1	Viscoelastic substances	I1998
	Hyaluronic acid injection or other substances used during surgical procedures on the eye is classified in this group. Hyaluronic acid injection for intra-articular administration (eg 2.5 mg/ampoule) used in the treatment of arthritis is classified in M5X.	
S1S9	Other surgical aids	I1998
	Preparations containing eg enzymes (chymotrypsin, zonolytics) for use in eye surgery; surgical irrigation solutions, eye washes for surgical use only, are classified in this group.	
S1T	OPHTHALMOLOGICAL DIAGNOSTIC AGENTS	I1998
	All diagnostics as far as they do not fit into other classes, diagnostic dyes eg rose bengal, fluoroscein.	