EPHMRA ANATOMICAL CLASSIFICATION

Section A

GUIDELINES 2019

Changed Classes/Guidelines: Changes Highlighted Final Version

Date of issue: 24th December 2018

A3	FUNCTIONAL GASTRO-INTESTINAL DISORDER DRUGS	R2003
A3A	PLAIN ANTISPASMODICS AND ANTICHOLINERGICS	R1993
	Includes all plain synthetic and natural antispasmodics and anticholinergics.	
A3B	Out of use; can be reused.	
A3C	ANTISPASMODIC/ATARACTIC COMBINATIONS	
	This group includes combinations with tranquillisers, meprobamate and/or barbiturates except when they are indicated for disorders of the autonomic nervous system and neurasthenia, in which case they are classified in N5B4.	
A3D	ANTISPASMODIC/ANALGESIC COMBINATIONS	R1997
	This group includes combinations with analgesics. Products also containing either tranquillisers or barbiturates and analgesics to be also classified in this group. Antispasmodics indicated exclusively for dysmenorrhoea are classified in G2X1.	
A3E	ANTISPASMODICS COMBINED WITH OTHER PRODUCTS	r2011
	Includes all other combinations not specified in A3C, A3D and A3F. Combinations of antispasmodics and antacids are classified in A2A3; antispasmodics with antiulcerants are classified in A2B9. Combinations of antispasmodics with antiflatulents are classified here.	
A3F	GASTROPROKINETICS	r2013
	This group includes products used for dyspepsia and gastro-oesophageal reflux. Compounds included are: alizapride, bromopride, cisapride, clebopride, cinitapride, domperidone, levosulpiride, metoclopramide, trimebutine. Prucalopride is classified in A6A9.	
	Combinations of gastroprokinetics with other substances are classified here if used for dyspepsia or gastro-oesophageal reflux.	
A3G	GASTRO-INTESTINAL SENSORIMOTOR MODULATORS	r201 <u>9</u> 4
	Products which are specifically developed to modulate the multiple symptoms of irritable bowel syndrome (IBS). Includes alosetron, tegaserod.	
	Linaclotide (290mcg) indicated for IBS-C (irritable bowel syndrome with constipation) is classified here; linaclotide (145mcg) indicated for chronic constipation is classified in A6A9. Products containing linaclotide for both chronic constipation and for IBS-C are classified here when there is no distinction by strength. Lubiprostone (8mcg) indicated for IBS-C is classified here; lubiprostone (24mcg) indicated for chronic constipation is classified in A6A9. Products containing plecanatide indicated for chronic constipation and IBS-C are classified here. Other drugs for constipation, including laxatives, are classified in A6A.	

A6	DRUGS FOR CONSTIPATION AND BOWEL CLEANSERS	r2014
	Includes laxatives and other products for constipation. Products that are both laxatives and bowel cleansers are classified in the appropriate laxative class. For the classification of products indicated for irritable bowel syndrome with constipation (IBS-C) see A3G.	
A6A	DRUGS FOR CONSTIPATION	r2014
A6A1	Faecal softening laxatives	r2015
	Includes products containing softening laxatives such as liquid paraffin or docusate sodium. Combinations of faecal softening laxatives with osmotic laxatives are classified here. Combinations with bulk-forming laxatives are classified in A6A3. Combinations with stimulant laxatives are classified in A6A2.	
	For castor oil products see A6A2. Glycerol suppositories are classified in A6A9.	
A6A2	Stimulant laxatives	r2013
	Includes products containing laxatives that have a stimulant effect on the intestinal membrane and peristalsis. Many of these are herbal, eg senna, or of herbal origin (anthraquinones, emodines, glycosides, etc). This group also includes phenolphthalein-derivatives, bisacodyl, and sodium picosulphate when used as a laxative. Products containing a stimulant laxative in combination with other laxative substances (except bulk-forming) are classified here.	
A6A3	Bulk-forming laxatives	r2013
	Includes products containing substances such as bran, ispaghula, methylcellulose, sterculia. Products containing a bulk-forming laxative in combination with other types of laxative are classified here.	
A6A4	Enemas	R2015
	Includes all products for constipation in enema form. Other rectal forms for constipation are classified as appropriate in the other constipation classes. Glycerol suppositories and effervescent suppositories are classified in A6A9.	
	Combination packs containing an enema and another form are classified according to the other form.	
A6A5	Out of use	D2013

A6A6	Osmotic laxatives	I2013
	Includes products containing osmotic laxatives. Substances include lactitol, lactulose, macrogols, magnesium citrate, magnesium hydroxide, magnesium sulphate, mannitol, sorbitol, etc. Combinations with other laxative substances are classified in A6A1, A6A2 and A6A3. Combinations with electrolytes that are present to ensure a neutral impact on electrolyte levels are classified in A6A7.	
A6A7	Osmotic laxatives with electrolytes	I2013
	Includes products containing osmotic laxatives in combination with electrolyte substances. These specific electrolytes are present to ensure a neutral impact on electrolyte levels.	
A6A9	Other drugs for constipation	r201 <u>9</u> 5
	Includes other drugs for constipation and combinations of laxatives not classified in A6A1-A6A7. Combinations of laxatives with centrally acting anti-obesity substances are classified in A8A.	
	Glycerol suppositories and effervescent suppositories are classified here.	
	Prucalopride for chronic constipation is classified here. Linaclotide (145mcg) indicated for chronic constipation is classified here; linaclotide (290mcg) indicated for IBS-C (irritable bowel syndrome with constipation) is classified in A3G. Products containing linaclotide for both chronic constipation and for IBS-C are classified in A3G when there is no distinction by strength. Lubiprostone (24mcg) indicated for chronic constipation is classified here; lubiprostone (8mcg) indicated for IBS-C is classified in A3G. Products containing plecanatide and indicated for both chronic constipation and IBS-C are classified in A3G.	

A7	ANTIDIARRHOEALS, ORAL ELECTROLYTE REPLACERS AND	R19
	INTESTINAL ANTI-INFLAMMATORIES INTESTINAL DISORDER PRODUCTS	<u>r20</u>
	Products for functional gastro-intestinal disorders are in A3 and products for	
	constipation and bowel cleansing are in A6.	
A7A	INTESTINAL ANTI-INFECTIVES ANTIDIARRHOEALS	r201
	Includes all products containing one or more intestinal anti-infectives with or without other substances that are used for diarrhoea and/or hepatic encephalopathy. 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.	
	Products containing rifaximin for either diarrhoea or hepatic encephalopathy are classified here. Products containing fidaxomicin for Clostridium difficile intestinal infections are classified here.	
A7B	INTESTINAL ADSORBENT ANTIDIARRHOEALS	r20
	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	R20
	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	I20
	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	I201
	Includes products containing corticosteroids for inflammatory bowel disorders.	
A7E9	Inflammatory bowel disorder products, other	<u>r</u> ¥20
	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.

<u>Darvadstrocel</u> (allogenic stem cells) for perianal fistulae in Crohn's disease are <u>classified here.</u>

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 ANTIDIARRHOEALSINTESTINAL DISORDER PRODUCTS, OTHER	<u>r</u> 11993 2019
	Includes all—other products for intestinal disorders, including antidiarrhoeal products.	

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.	
B1C3	GP IIb/IIIa (glycoprotein) antagonist platelet aggregation inhibitors	12000
	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	<u>r</u> 1201 <u>9</u> 3
	Includes products containing direct factor Xa inhibitors, eg apixaban, betrixaban, edoxaban, rivaroxaban.	

B2D	BLOOD COAGULATION	
B2D1	Factor VIII, including substitutes	<u>r</u> R200
		5 2019
	Includes antihaemophilic globulin A, emcizumab, etc. Products containing von Willebrand factor only are classified in B2D9.	
B2D2	Factors II, VII, IX and X	
	Includes antihaemophilic globulin B and prothrombin complex.	
B2D3	Anti-inhibitor-coagulation complex	R2003
	Includes aPCC (activated prothrombin complex concentrate), activated FVII (FVIIa), and eptacog alfa.	
B2D4	Factor XIII	
B2D5	Fibrinogen	
B2D6	Fresh frozen plasma and antihaemophilic plasma	
B2D7	Cohn-Fraction I	
B2D8	Platelet concentrates	
B2D9	Other blood fractions	R2005
	Includes products containing von Willebrand factor (single ingredient).	
B2E	THROMBOPOIETIN AGONISTS	I2012
	Includes products containing thrombopoietin agonists, such as eltrombopag and romiplostim.	
B2F	TISSUE SEALING PREPARATIONS	r2016
	Includes products imitating the physiological process of fibrin formation which are used for tissue sealing, haemostasis and support of wound healing. Products containing thrombin/collagen for the prevention of bleeding prior to implantation of ICDs/pacemakers are classified here.	
B2G	SYSTEMIC HAEMOSTATICS	<u>r</u> R200 62019
	Tissue extracts with haemostatic activity, and including snake venoms causing blood clotting, and hormone products exclusively promoted as haemostatics. Includes products containing parenteral conjugated oestrogens for control of uterine bleeding.	

D5 NONSTEROIDAL PRODUCTS FOR INFLAMMATORY SKIN r20190 **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 rR201 095 Includes products, containing substances such as tar, coal tar, ichthammol, dithranol, psoralens, salicylic acid for the treatment of psoriasis. These products may also be for other inflammatory skin conditions. Products containing corticosteroids in combination with coal tar or salicylic acid for psoriasis are classified here. These products may also be for other inflammatory skin conditions. Includes products consisting of coal tar or calcipotriol, alone or in combination, when indicated for psoriasis. D₅B SYSTEMIC ANTIPSORIASIS PRODUCTS r20198 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 non-skin conditions, eg arthritis, are classified in L4C. Psoriatic arthritis is defined as a skin condition. Apremilast is classified here if only for psoriatic skin conditions. D5X OTHER NONSTEROIDAL PRODUCTS FOR INFLAMMATORY SKIN r20198 **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. Products containing aminolaevulinic acid for actinic keratosis, basal cell carcinoma or Bowen syndrome are classified in L1X8. Products containing topical fluorouracil for actinic keratosis are classified in L1B. Products containing dupilumab for atopic dermatitis only are classified here. Products containing dupilumab for both atopic dermatitis and asthma are classified in L4C.

D7	TOPICAL CORTICOSTEROIDS	
D7A	PLAIN TOPICAL CORTICOSTEROIDS	
	Includes all dermatological products containing one or more corticosteroids and no other active ingredient. Topical anabolic steroids are classified in D3A.	
D7B	TOPICAL CORTICOSTEROID COMBINATIONS	<u>r2019</u>
	Includes all dermatological products containing corticosteroids in combination with one or more active ingredients, except those classified in <u>D5A or D10A</u> . It should be noted that, in the classification, the term antibacterial includes antibiotics, sulphonamides and antiseptics.	
	Also the basic criterion which determines the classification for products of this nature is the type of anti-infective product (antibacterial, antifungal or combination of the two) which is in combination with the corticosteroid. If the product in combination with the corticosteroid is not an anti-infective the product should automatically be classified in D7B4.	
D7B1	Combinations of corticosteroids with antibacterials	<u>r2019</u> R2002
	If, in addition to corticosteroid and antibacterial or bacteriostatic (including antiseptic) agents (eg-salicylic acid, hexachlorophene) the product also contains non-anti-infective ingredients such as an antihistamine, local anaesthetic, oestrogen, urea, etc then it should still be classified in D7B1.	
D7B2	Combinations of corticosteroids with antifungals	
	If, in addition to corticosteroids and antifungal agents, the product also contains non-anti-infective ingredients such as an antihistamine, local anaesthetic, urea, etc then it should still be classified in D7B2.	
D7B3	Combinations of corticosteroids with antibacterials and antifungals	
	It should be noted that if a product contains not only corticosteroid + antibacterial + antifungal but also additional ingredients such as urea, an antihistamine, etc it should still be classified in D7B3.	
D7B4	Other corticosteroid combinations	<u>r</u> R200 4 <u>2019</u>
	This would include Includes combinations of corticosteroids with all other types of products including, for example, antihistamines, local anaesthetics, etc. Combinations of corticosteroids with coal tar or salicylic acid and specifically for psoriasis are classified in D5A; these products may also be for other inflammatory skin conditions as well as psoriasis.	

D11 OTHER DERMATOLOGICAL PREPARATIONS

D11A OTHER DERMATOLOGICAL PREPARATIONS

r20198

Includes medicated shampoos, medicated soaps, scalp lotions (other than in D5A, D1A3, D7B, D8A, D10A). Products for pigmentation disorders, systemic products for the treatment of dermatological conditions, anti-corn agents (plasters, tinctures, including products with salicylic acid especially formulated for warts, corns and calluses etc), and hair-restorers are classified in this group.

Products containing finasteride 1mg and for alopecia are classified here. Products containing finasteride 5mg and for BPH are classified in G4C3.

Products containing extracts of chamomile are classified in D3A.

Psoralens, when used for inflammatory conditions, are classified in D5.

Products containing sirolimus gel for tuberous sclerosis are classified here.

G2	OTHER GYNAECOLOGICALS	
G2A	LABOUR INDUCERSUTEROTONIC PRODUCTS	<u>r2019</u>
	Includes products used to induce labour (including delivery of placenta) and/or to reduce postpartum haemorrhage. Includes oxytocics and prostaglandins E1 and E2, and products used for cervical dilatation.	
G2B	TOPICAL CONTRACEPTIVES	
G2C	Out of use; can be reused from 2000.	D1997
G2D	PROLACTIN INHIBITORS	R1999
	This group includes products used as prolactin inhibitors and containing bromocriptine, cabergoline, pergolide, quinagolide, terguride etc. Bromocriptine in lower doses (1 mg, 2.5 mg) for sexual disorders is classified here; higher doses for parkinsonism are in N4A. In Japan, bromocriptine is classified in N4A.	
G2E	LABOUR INHIBITORS	I1997
	This group includes products acting as labour inhibitors eg ritodrine.	
G2F	TOPICAL SEX HORMONES	11997 <u>r</u> 2019
	This group includes all topical hormones and/or steroids indicated for gynaecological conditions. <u>Transdermal patches and vaginal formulations containing oestrogens and intended for a systemic effect are classified in G3C.</u>	
G2X	OTHER GYNAECOLOGICAL PRODUCTS	I1997
G2X1	Gynaecological antispasmodics	I1997
	This group includes oral analgesics and antispasmodics indicated exclusively for dysmenorrhoea.	
G2X9	Other gynaecologicals	r2016
	Specific products included in this class are non-hormonal anti-inflammatories (eg benzydamine) which are indicated specifically to treat gynaecological conditions. Includes lubricants for intimate vaginal use only. Includes products (lactogogues) for the promotion of milk production.	
	Products containing paroxetine (7.5mg daily) and indicated for menopausal vasomotor symptoms are classified here.	
	Products containing flibanserin and indicated for hypoactive sexual desire disorder (HSDD) in women are classified here.	

G3C	OESTROGENS, EXCLUDING G3A, G3E, G3F	r201 <u>9</u> 5
	Oestrogens in combination with non-hormonal substances are classified here.	
	Products containing a SERM in combination with an oestrogen and indicated for the short-term treatment of menopausal symptoms together with the prevention of osteoporosis are classified here.	
	Includes transdermal patches and vaginal formulations containing oestrogens and intended for a systemic effect.	
	Products containing parenteral conjugated oestrogens for uterine bleeding are classified in B2G.	
G3D	PROGESTOGENS, EXCLUDING G3A, G3F	R1997
G3E	ANDROGEN WITH FEMALE HORMONE COMBINATIONS	
G3F	OESTROGEN WITH PROGESTOGEN COMBINATIONS, EXCLUDING G3A	
G3G	GONADOTROPHINS, INCLUDING OTHER OVULATION STIMULANTS	
G3H	Out of use; can be reused from 2009.	D2006
G3J	SERMS (SELECTIVE OESTROGEN RECEPTOR MODULATORS)	r2015
	Included in this class are products that contain selective oestrogen receptor modulators, eg lasofoxifene, raloxifene. When primarily indicated for cancer, SERMs are classified in L2.	
	Products containing a SERM in combination with an oestrogen and indicated for the short-term treatment of menopausal symptoms together with the prevention of osteoporosis are classified in G3C.	
G3X	OTHER SEX HORMONES AND SIMILAR PRODUCTS	r2015
	Includes mammary extracts and other hormonal preparations for sexual disorders eg placenta extracts. Cyproterone acetate (tab 10mg) is classified here; higher doses (50 mg) and injectable forms are in L2B2 when used as cytostatics. Includes products containing tibolone.	
	Products containing mifepristone are classified here if indicated as abortifacients alone, or with other indications, or in G3A6 if indicated for emergency contraception.	
	Products containing ulipristal are classified here if indicated for uterine fibroids, or in G3A6 if indicated for emergency contraception.	

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	r201 <u>9</u> 7
	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, R3L <u>32</u> - Anti-asthmatic inhalants acting topically on the bronchioles.	

J4	ANTIMYCOBACTERIALS	R1993
J4A	ANTITUBERCULAR PRODUCTS	r2009
	Includes all specific tubercular preparations as well as streptomycin and dihydrostreptomycin. Other antibacterials such as viomycin and cycloserine which are indicated specifically for tuberculosis are included as well as rifampicin and rifamycin where they are used mostly as tuberculostatics. Where rifampicin and rifamycin are indicated for several conditions, then they are classified in J1M.	
	The definition of 'single ingredient' means that only one specific antitubercular drug is present in the product. For example, if a product contains an antitubercular substance and also pyridoxine, this is a single ingredient product and will be classified in J4A1.	
	Kits include various different tablets or forms with different ingredients. Fixed dose products contain the ingredients in one dosage form.	
J4A1	Antituberculars, single ingredient	I2000
J4A2	Antituberculars, kits, four or more ingredients	12000
J4A3	Antituberculars, kits, three ingredients	I2000
J4A4	Antituberculars, kits, two ingredients	I2000
J4A5	Antituberculars, fixed dose, four or more ingredients	I2000
J4A6	Antituberculars, fixed dose, three ingredients	I2000
J4A7	Antituberculars, fixed dose, two ingredients	I2000
J4A9	Antituberculars, others	I2000
J4B	DRUGS FOR THE TREATMENT OF LEPRA	r201 <u>9</u> 8
	Includes preparations used for the treatment of lepra (eg aldesulphone, clofazimine, dapsone). Products containing thalidomide for cancer are classified in L1X29 and for erythema nodosum leprosum (ENL) in L4X. Products for both cancer and ENL are classified in L1X29.	

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	r201 <u>9</u> 8
	Includes eg aclarubicin, bleomycin, dactinomycin, daunorubicin, doxorubicin, epirubicin, idarubicin, mitomycin, mithramycin, mitoxantrone, plicamycin, zorubicin.	
	Products containing mitoxantrone and indicated for both cancer and multiple sclerosis are classified here.	
	Products containing gemtuzumab ozogamicin and inotuzumab ozogamicin are classified in L1G9.	
L1F	PLATINUM ANTINEOPLASTICS	I2014
	Includes products containing eg carboplatin, cisplatin, oxaliplatin.	

L1G	MONOCLONAL ANTIBODY ANTINEOPLASTICS	<u>R</u> #20 <u>9</u> 8
	Includes products containing monoclonal antibodies for neoplasms eg alemtuzumab, bevacizumab, cetuximab, edrecolomab, ibritumomab, rituximab, trastuzumab, etc.	
	Products containing alemtuzumab and indicated for cancer only are classified here. Products containing alemtuzumab and indicated for multiple sclerosis are classified in N7A.	
	Brentuximab vedotin, gemtuzumab ozogamicin, ibritumomab tiuxetan, inotuzumab ozogamicin, tocitumomab iodine 131 and trastuzumab emtansine are classified here.	
	Antineoplastic monoclonal antibodies against protein kinases are classified here and not in L1H.	
<u>L1G1</u>	Monoclonal antibody antineoplastics, CD20	<u>120</u> 1
	Includes products containing obinutuzumab, ofatumumab, rituximab with hyaluronidase, etc.	
<u>L1G2</u>	Monoclonal antibody antineoplastics, VEGF/VEGFR	<u>120</u> 1
	Includes products containing bevacizumab, ramucirumab, etc.	
<u>L1G3</u>	Monoclonal antibody antineoplastics, HER-2	<u>1201</u>
	Includes products containing margetuximab, pertuzumab, trastuzumab, trastuzumab emtansine, etc.	
<u>L1G4</u>	Monoclonal antibody antineoplastics, EGFR	<u>120</u> 2
	Includes products containing cetuximab, necitumumab, nimotuzumab, panitumumab, etc.	
<u>L1G5</u>	Monoclonal antibody antineoplastics, PD-1/PD-L1	<u>120</u>
	Includes products containing atezolizumab, avelumab, cemiplimab, durvalumab, nivolumab, pembrolizumab, tislelizumab, etc.	
<u>L1G9</u>	Monoclonal antibody antineoplastics, other	<u>120</u> 2
	Includes antibodies with other targets including other CD targets, CTLA-4 (ipilimumab), etc.	
	Includes antibody drug conjugates (ADCs) if not classified with the target class	

		(brentuximab vedotin, gemtuzumab ozogamicin, inotuzumab ozogamicin). Includes radio-labelled antibodies (ibritumomab tiuxetan, tositumomab iodine-131).	
		Includes alemtuzumab, blinatumomab, brentuximab vedotin, catumaxomab, daratumumab, dinutuximab, elotuzumab, gemtuzumab ozogamicin, ibritumomab tiuxetan, inotuzumab ozogamicin, ipilimumab, mogamulizumab, olaratumab, racotumomab, rovalpituzumab tesirine, siltuximab, tositumomab iodine-131, etc.	
		Products containing alemtuzumab and indicated for cancer only are classified here. Products containing alemtuzumab and indicated for multiple sclerosis are classified in N7A.	
	L1H	PROTEIN KINASE INHIBITOR ANTINEOPLASTICS	<u>R</u> #201 <u>9</u> 8
		Includes protein kinase inhibitors for neoplasms, eg axitinib, crizotinib, dasatinib, erlotinib, everolimus, gefitinib, imatinib, lapatinib, nilotinib, pazopanib, regorafenib, ribociclib, ruxolitinib, sorafenib, sunitinib, temsirolimus, vandetanib, vemurafenib, etc.	
		Products containing both ribociclib and letrozole are classified here.	
		Antineoplastic monoclonal antibodies against protein kinases are classified in L1G.	
	<u>L1H1</u>	Protein kinase inhibitor antineoplastics, BCR-ABL	<u>I2019</u>
		Includes products containing bosutinib, dasatinib, imatinib, nilotinib, ponatinib, radotinib, etc.	
	<u>L1H2</u>	Protein kinase inhibitor antineoplastics, EGFR	<u>I2019</u>
		Includes products containing afatinib, dacomitinib, erlotinib, gefitinib, icotinib, olmutinib, osimertinib, varlitinib, etc.	
	<u>L1H3</u>	Protein kinase inhibitor antineoplastics, ALK	<u>I2019</u>
		Includes products containing alectinib, brigatinib, ceritinib, crizotinib, lorlatinib, etc.	
	<u>L1H4</u>	Protein kinase inhibitor antineoplastics, BRAF/MEK	<u>I2019</u>
		Includes products containing binimetinib, cobimetinib, dabrafenib, encorafenib, selumetinib, trametinib, vemurafenib, etc.	
	<u>L1H5</u>	Protein kinase inhibitor antineoplastics, CDK 4/6	<u>I2019</u>

<u>L1H9</u>	Includes products containing abemaciclib, palbociclib, ribociclib, etc. Products containing both ribociclib and letrozole are classified here. Protein kinase inhibitor antineoplastics, other	<u>I2019</u>
	Includes all other protein kinase inhibitor antineoplastics, for example those inhibiting HER-2, JAK 1-2, BTK, Pi3K, etc.	
	Includes acalabrutinib, apatinib, axitinib, cabozantinib, everolimus, ibrutinib, idelalisib, lapatinib, lenvatinib, midostaurin, neratinib, nintedanib, pazopanib, regorafenib, ruxolitinib, sorafenib, sunitinib, temsirolimus, tivozanib, vandetanib, etc.	
L1J	PROTEASOME INHIBITOR ANTINEOPLASTICS	I2018
	Includes products containing proteasome inhibitors for neoplasms, eg bortezomib, carfilzomib, ixazomib, etc.	
L1X	ALL OTHER ANTINEOPLASTICS	R2018
L1X1	Alternative preparations for cancer therapy	r2018
	Includes products derived from Viscum (mistletoe).	
<u>L1X2</u>	<u>Lidomide antineoplastics</u>	<u>I2019</u>
	Includes products containing lenalidomide, pomalidomide or thalidomide for multiple myeloma and other cancers.	
	Products containing thalidomide for both cancer and erythema nodosum leprosum (ENL) are classified here. Products containing thalidomide for ENL only are classified in L4X.	
L1X3	HDAC inhibitor antineoplastics	I2018
	Includes products containing HDAC inhibitors for neoplasms, eg belinostat, entinostat, panobinostat, romidepsin, tucidinostat, vorinostat, etc.	
<u>L1X4</u>	PARP inhibitor antineoplastics	<u>I2019</u>
	Includes products containing niraparib, olaparib, rucaparib, talazoparib, veliparib, etc.	
<u>L1X5</u>	CAR T-cell therapy antineoplastics	<u>I2019</u>
	Includes products containing axicabtagene ciloleucel, tisagenlecleucel, etc.	

L1X8	Photosensitisers for cancer therapy	<u>r</u> 4201 <u>9</u> 8
	Includes products containing photosensitisers for use in cancer therapy, eg aminolaevulinic acid, methyl aminolaevulinate, methoxsalen, porfimer, talaporfin, temoporfin, etc.	
	Products containing aminolaevulinic acid for actinic keratosis, basal cell carcinoma or Bowen syndrome are classified here. Products containing aminolaevulinic acid for use in diagnostic procedures are classified in T1X.	
	Products containing methoxsalen for other skin conditions such as psoriasis or vitiligo are classified in the appropriate D classes.	
	Products containing vertoporfin for macular degeneration are classified in S1P.	
L1X9	All other antineoplastics	r201 <u>9</u> 8
	Includes amsacrine, enzymes, estramustine, gallium nitrate, methylhydralazine, mitotane, procarbazine, substituted urea, tasonermin, vosaroxin. Also includes celecoxib for familial adenomatous polyposis (FAP).	
	Products containing aflibercept for cancer are classified here. Products containing aflibercept for macular degeneration are classified in S1P.	
	Includes products containing hedgehog pathway inhibitors, eg glasdegib, sonidegib, vismodegib, etc. Products containing lenalidomide, pomalidomide or thalidomide for multiple myeloma and other cancers are classified here. Products containing thalidomide for both cancer and erythema nodosum leprosum (ENL) are classified here. Products containing thalidomide for ENL only are in L4X. CAR T cell therapies are classified here, for example axicabtagene ciloleucel,	
	tisagenlecleucel T.	

L2	CYTOSTATIC HORMONE THERAPY	I1994
	Includes all types of hormones used primarily in the treatment of cancers, eg adrenocorticoids, progestogens, oestrogens, anti-oestrogens and androgens.	
L2A	CYTOSTATIC HORMONES	I1994
L2A1	Cytostatic oestrogens	I1994
L2A2	Cytostatic progestogens	I1994
L2A3	Cytostatic gonadotrophin-releasing hormone analogues	R1995
	Buserelin, deslorelin, goserelin, nafarelin, leuprorelin and triptorelin are classified here. When these substances are not used as cytostatics they are classified in H1C.	
L2A9	Other cytostatic hormones	I1994
	Includes substances such as drostanolone, testolactone.	
L2B	CYTOSTATIC HORMONE ANTAGONISTS	I1994
L2B1	Cytostatic anti-oestrogens	R1997
	Includes substances such as tamoxifen, mepitiostane, epitiostanol, toremifene.	
L2B2	Cytostatic anti-androgens	I1994
	Includes substances such as flutamide, nilutamide. Cyproterone acetate (50 mg; injectable forms) is classified here.	
L2B3	Cytostatic aromatase inhibitors	r201 <u>9</u> 8
	Includes aminoglutethamide, anastrozole, exemestane, formestane, letrozole.	
	Products containing both ribociclib and letrozole are classified in L1H ₅ .	
L2B9	Other cytostatic hormone antagonists	R2003
	Includes fulvestrant.	

L4	IMMUNOSUPPRESSANTS	R2010
L4A	Out of use; can be reused from 2013.	D2010
L4B	ANTI-TNF PRODUCTS	r201 <u>9</u> 8
	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 <u>for psoriatic conditions only</u> are classified in <u>L4X.D5B.</u>	
L4C	INTERLEUKIN INHIBITORS	r201 <u>9</u> 8
	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 tocilizumab and indicated for both arthritic conditions and also giant cell arteritis are classified in M1C. Products containing secukinumab or ustekinumab and indicated for skin conditions such as psoriasis and also other non-skin conditions , eg rheumatoid arthritis, are classified here.	

L4X OTHER IMMUNOSUPPRESSANTS

r20198

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 <u>for psoriatic skin conditions only, are classified in D5B are classified here.</u> <u>Psoriatic arthritis is defined as a skin condition.</u>

Products containing lenalidomide, pomalidomide or thalidomide for multiple myeloma and other cancers are classified in L1X29. Products containing thalidomide for both cancer and erythema nodosum leprosum (ENL) are classified in L1X29. Products containing thalidomide for erythema nodosum leprosum only are classified here.

Corticosteroids are not classified here.

M1C | SPECIFIC ANTI-RHEUMATIC AGENTS

r20198

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 anakinra. Products containing tocilizumab and indicated for both arthritis and giant cell arteritis are classified here. Other interleukin inhibitors indicated for multiple conditions including arthritis are classified in L4C.

Products containing apremilast are classified in L4X.

Psoriatic arthritis is defined as a skin condition.

M5	OTHER DRUGS FOR DISORDERS OF THE MUSCULO-SKELETAL SYSTEM	
M5A	Out of use; can be reused from 1996.	D1993
M5B	BONE CALCIUM REGULATORS	R2002
	Calcitonin products are classified in H4A. Products containing calcium only are classified in A12A and fluoride products are classified in A12C2.	
M5B1	Out of use; can be reused from 2010.	D2007
M5B2	Out of use; can be reused from 2010.	D2007
M5B3	Bisphosphonates for osteoporosis and related disorders	I2007
	Includes products indicated and used mainly for osteoporosis and Paget's disease, eg those containing alendronic acid, etidronic acid, ibandronic acid, risedronic acid, zoledronic acid, when indicated for these conditions. Combinations of bisphosphonates with calcium, calcitriol or colecalciferol are also classified here.	
M5B4	Bisphosphonates for tumour-related calcium disorders	I2007
	Includes products indicated and used mainly for tumour-related calcium disorders (eg hypercalcaemia of malignancy) eg those containing clodronic acid, etidronic acid, ibandronic acid, pamidronic acid, zoledronic acid when indicated for these conditions.	
M5B9	Other bone calcium regulators	I2002
	Includes other specific products which are used for osteoporosis (eg ipriflavone).	
M5X	ALL OTHER MUSCULOSKELETAL PRODUCTS	<u>r</u> R20 <u>1</u> <u>906</u>
	Includes all other products for disorders of the musculoskeletal system not classified elsewhere. Includes musculoskeletal products containing substances such as cartilage extract, chondroitin, etc. Products containing chondroitin and glucosamine alone or in combination with other substances are classified here. Combinations of glucosamine with nonsteroidal anti-inflammatories are classified in M1A2. Topical glucosamine and chondroitin products are classified in M2A.	
	Includes hydroquinine indicated for restless leg syndrome.	
	Includes herbal products used for musculoskeletal pain.	

	<u>Products containing burosumab for X-linked hypophosphataemia are classified here.</u>	

N7	OTHER CNS DRUGS	R1996
N7A	MULTIPLE SCLEROSIS PRODUCTS	<u>r</u> 1 201 <u>9</u> 7
	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 L1G9.	
	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	r2018
	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.	
	Products indicated for amytrophic lateral sclerosis (ALS) are classified here.	

R3C	NON-STEROIDAL RESPIRATORY ANTI-INFLAMMATORIES	r2016	Ī
	This group contains respiratory antihistamines and non-steroidal respiratory anti- inflammatory products. It includes azelastine, cromoglycic acid, ketotifen, levocabastine, and tranilast. In Japan only, terfenadine is included in this group. In other countries it is classified in R6A. Excluded are combinations of these compounds with B2-agonists (R3E).		
R3C1	Non-steroidal respiratory anti-inflammatories, inhalant		
R3C2	Non-steroidal respiratory anti-inflammatories, systemic		
R3D	CORTICOIDS	r201 <u>9</u> 6	
	Excluded are combinations of corticoids with B2-agonists (R3F) and LAMA/LABA combinations (R3L32).		
R3D1	Corticoids, inhalant	R2007	
	Includes plain inhalant corticosteroids only. Also includes products indicated for both rhinitis and asthma.		
R3D2	Corticoids, systemic	r201 <u>9</u> 6	
	This subgroup includes combinations only, with the exception of those classified in R3F and R3L <u>32</u> .		
	Plain systemic corticosteroids are classified in H2A.		
R3E	B2-AGONIST AND R3C COMBINATIONS	r2016	
R3E1	B2-agonist and R3C combinations, inhalant	r2016	
R3E2	B2-agonist and R3C combinations, systemic	r2016	
R3F	B2-AGONIST AND CORTICOID COMBINATIONS	r201 <u>9</u> 6	
	Combinations of LAMA/LABAs with corticosteroids are classified in R3L <u>3</u> 2.		
R3F1	B2-agonist and corticoid combinations, inhalant	r2016	
R3F2	B2-agonist and corticoid combinations, systemic	r2016	
R3G	Out of use	D2016	
R3G1	Out of use	D2002	

R3G2	Out of use	D2016

R3G3	Out of use	D2016
R3G4	Out of use	D2016
R3H	PDE4 INHIBITORS FOR ASTHMA/COPD	I2005
	Includes cilomilast, roflumilast.	
R3H1	PDE4 inhibitors for asthma/COPD, inhalant	I2005
R3H2	PDE4 inhibitors for asthma/COPD, systemic	I2005
R3I	DEVICES FOR ASTHMATIC CONDITIONS	R2001
	This excludes nebulising machines/nebulators which are classified in V7A.	
R3J	ANTILEUKOTRIENE ANTI-ASTHMATICS	R2004
	Includes montelukast, pranlukast, zafirlukast, and 5-lipoxygenase inhibitors such as zileuton when indicated for asthma.	
R3J1	Antileukotriene anti-asthmatics, inhalant	R1998
R3J2	Antileukotriene anti-asthmatics, systemic	R1998
R3K	ANTICHOLINERGICS, PLAIN	I2016
R3K1	Short-acting anticholinergics, plain, inhalant	I2016
	Includes products containing eg, ipratropium bromide, oxitropium bromide, etc	
R3K2	Long-acting anticholinergics, plain, inhalant	I2016
	Includes products containing eg aclidinium bromide, flutropium bromide, glycopyrronium bromide, tiotropium bromide, umeclidinium bromide, etc.	
R3K3	Anticholinergics, plain, systemic	I2016
	Includes products containing anticholinergics (short- or long-acting) for systemic use.	

R3L	ANTICHOLINERGICS IN COMBINATION WITH B2-AGONISTS	I2016
R3L1	Short-acting anticholinergic combinations with short-acting B2-agonists, inhalant	I2016
	Includes products containing eg ipratropium bromide with fenoterol, ipratroprium bromide with salbutamol, etc	
R3L2	Long-acting anticholinergic combinations with long-acting B2-agonists, inhalant	<u>Ir</u> 201 <u>9</u> €
	Includes products containing eg aclidinium bromide with formoterol, glycopyrronium bromide with indacaterol, tiotropium bromide with formoterol, tiotropium bromide with olodaterol, umeclidinium bromide with vilanterol, etc. These are known as LAMA/LABA combinations.	
	LAMA/LABA combinations also containing a corticosteroid are classified here.	
<u>R3L3</u>	Long-acting anticholinergic combinations with both long-acting B2-agonists and with corticosteroids, inhalant	<u>I2019</u>
	Includes products containing a triple combination of a long-acting anticholinergic, a long-acting B2-agonist and a corticosteroid. Includes glycopyrronium bromide plus formoterol plus beclomethasone or budesonide, tiotropium bromide plus formoterol plus ciclesonide, umeclidinium bromide plus vilanterol plus fluticasone, etc.	
R3L8	Anticholinergic combinations with B2-agonists, systemic	I2016
	Includes products containing anticholinergics (short- or long-acting) in combination with B2-agonists (short- or long-acting) for systemic use.	
R3L9	Anticholinergic combinations with B2-agonists, inhalant, other	I2016
	Includes products containing anticholinergics in combination with B2-agonists that cannot be classified in the other R3L classes.	
R3M	INTERLEUKIN INHIBITOR ANTI-ASTHMATICS	<u>r</u> 1201 <u>9</u> 8
	Includes products containing interleukin inhibitors for asthma, eg benralizumab, mepolizumab, reslizumab, etc.	
	Products containing mepolizumab for asthma only and for asthma and EGPA (eosinophilic granulomatosis with polyangiitis) are classified here.	
R3X	ALL OTHER ANTI-ASTHMA AND COPD PRODUCTS	R2000
R3X1	All other anti-asthma and COPD products, inhalant	R2003

	This subgroup includes anti-asthmatic cigarettes.	
R3X2	All other anti-asthma and COPD products, systemic	r2018
	Includes products containing alpha-1-proteinase inhibitor (alpha-1-antitrypsin).	

	V3X	ALL OTHER THERAPEUTIC PRODUCTS	<u>r</u> R20 <u>1</u>
			<u>9</u> 07
1		Includes products with multiple anatomical effects, not readily classifiable in any single group. Large packs of chemicals (bulk packs) which are intended for preparation of formulations in the pharmacy/laboratory are classified here. Kelp products are classified here. Includes medical oxygen cylinders.	
		4 th level used only in Germany and Hungary.	