# EPHMRA ANATOMICAL CLASSIFICATION GUIDELINES 2022

"The Anatomical Classification of Pharmaceutical Products has been developed and maintained by the European Pharmaceutical Marketing Research Association (EphMRA) and is therefore the intellectual property of this Association.

EphMRA's Classification Committee prepares the guidelines for this classification system and takes care for new entries, changes and improvements in consultation with the product's manufacturer. The contents of the Anatomical Classification of Pharmaceutical Products remain the copyright to EphMRA. Permission for use need not be sought and no fee is required. We would appreciate, however, the acknowledgement of EphMRA Copyright in publications etc.

Users of this classification system should keep in mind that Pharmaceutical markets can be segmented according to numerous criteria."

© EphMRA 2022

# CONTENTS

**V VARIOUS** 

CONTENTS	<u>PAGE</u>
INTRODUCTION	
A ALIMENTARY TRACT AND METABOLISM	1
B BLOOD AND BLOOD FORMING ORGANS	28
C CARDIOVASCULAR SYSTEM	36
D DERMATOLOGICALS	51
G GENITO-URINARY SYSTEM AND SEX HORMONES	58
H SYSTEMIC HORMONAL PREPARATIONS (EXCLUDING SEX HORMONES)	68
J GENERAL ANTI-INFECTIVES SYSTEMIC	72
K HOSPITAL SOLUTIONS	89
L ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS	97
M MUSCULO-SKELETAL SYSTEM	108
N NERVOUS SYSTEM	113
P PARASITOLOGY	124
R RESPIRATORY SYSTEM	126
S SENSORY ORGANS	138
T DIAGNOSTIC AGENTS	145

147

#### **INTRODUCTION**

The Anatomical Classification was initiated in 1971 by EphMRA. It has been developed jointly by Intellus/PBIRG and EphMRA. It is a subjective method of grouping certain pharmaceutical products and does not represent any particular market, as would be the case with any other classification system.

These notes are known as the Anatomical Classification Guidelines, and are intended to be used in conjunction with the classification. This **English** version of the Guidelines is the authorised, definitive version produced by EphMRA.

Since the guidelines were originally prepared, various additions and amendments have been made in order to better explain which kinds of products are included in a particular group and the rules governing the allocation of products to a particular group.

Where it is felt that the heading is self-explanatory, no guideline was prepared eg N2C Anti-migraine preparations. In other cases, the guideline is clearly stated eg N5C Tranquillisers - "includes minor tranquillisers, eg benzodiazepines, hydroxyzine, meprobamate....

One or two words used in the guidelines sometimes cause confusion, in particular the terms plain and combination. A plain product can contain one or more active ingredients of a similar type, eg a topical steroid containing one or two corticosteroids. When another active ingredient is added eg an anti-infective agent, it becomes a combination product. Only the active ingredients are taken into consideration when determining whether a product is a plain product or a combination. Non-therapeutic ingredients, eg the propellant in bronchodilator aerosols, are ignored.

Whilst every effort has been made to eliminate anomalies in the text, and to make clear the definition of types of products included in any particular class, it is inevitable that there will still be guidelines which are not clear. If you feel there are specific improvements which could be made, please make your views known to the Chairman of the Classification Committee.

There are certain codes used against a class entry in the Guidelines to indicate the status and date of change of that class.

From Jan 2008 a modification to the R status has been introduced. Upper case letter R is used for a major revision of a class – eg split of a third level to fourth levels. Lower case r is used for a minor revision eg clarification of explanation. Before Jan 2008 only upper case R has been used for a revision and so there is no distinction between minor or major revisions.

I = Introduction

R = Revision (major)

r = revision (minor)

D = Deletion

#### For example:

This indicates a class was introduced from the beginning of 2006.

R2006 This indicates a class was revised in content or meaning from the beginning of 2006;

this could be a major or a minor change.

R2008 This indicates a class was revised in a major way from the beginning of 2008. This indicates a class was revised in a minor way from the beginning of 2008.

D2006 This indicates a class was deleted from the beginning of 2006.

Anatomical Classification Guidelines V2022

# Use and Re-Use of Classification Codes

- 1. The actual classification code does not have any meaning except at the first level (eg A). In addition, the letter X and the number 9 are usually used for the 'Other' classes.
- 2. The sequence of codes does not generally imply any priority or meaning.
- 3. In some cases a rule is created for a particular area where the order of the classes is important; however any code can be used for any description.
- 4. There can be gaps between codes in a sequence eg A10P can be followed by A10S, ie there are no A10Q or A10R classes. This may be because room is being left for classes that may come into operation later but not at the moment.
- 5. The letters I and O are avoided because of confusion with numbers 1 and 0.
- 6. If a code is deleted it is not used again for 3 years; this is to avoid confusion in describing classes by code and to ensure there is not mixed data in datasets created at the time of changeover to the new code structure. This code discontinuity can cause gaps to appear in a code sequence; there is no significance to this for the actual classification.
- 7. Codes should not be different to the WHO codes at the third level; in some cases this may exist for historical reasons before harmonisation work started.
- 8. The valid EphMRA codes are from A to V7.



A	ALIMENTARY TRACT AND METABOLISM	
A1	STOMATOLOGICALS, MOUTH PREPARATIONS, MEDICINAL DENTIFRICES ETC	
A1A	STOMATOLOGICALS	R2007
	Includes the pharmaceutical preparations for the anterior part of the mouth i.e. for teeth, gums etc. Products indicated both for the posterior part of the mouth and throat infections are classified in either R2A or A1A depending on the main indication. Pilocarpine used for dry mouth is classified here. Non-pharmaceutical products (especially non-medicated toothpastes and chewing gum, non-medicated gargles, non-medicinal dental products etc) are classified in V7A and all local anaesthetics for surgery and pain relief are classified in N1B. Systemic anti-infectives for the treatment of stomatological conditions are classified in J.	
	4th level used in France, French West Africa, FTO, and Italy.	
A1A1	Toothpastes	
	Toothpastes as pastes, powders, liquids, chewing gum excluding the ones containing fluorine (see A1A4).	
A1A2	Mouth antiseptics and anti-infectives	R1999
	Mouth antiseptics and anti-infectives for the anterior part of the mouth (teeth, gums, etc) such as mouthwashes, gargles, pastes, tinctures, oral gels etc. If they extend their activity to the posterior part of the mouth and throat they are classified in R2A, except if containing fluorine (see A1A4). Antifungal products in oral topical form are classified in A1B.	
A1A3	Mouth anti-inflammatories and mouth analgesics for topical use	
	Mouth anti-inflammatories and mouth analgesics for topical use for the anterior part of the mouth (teeth, gums etc) including corticoids. Otherwise classify in R2A. For products containing fluorine see A1A4.	
A1A4	Mouth preparations w/fluorine	
	All preparations containing fluorine including toothpaste, chewing gum, liquids and powders.	
A1A5	All other stomatologicals	R2001
	All preparations not classifiable in the preceding 4th level groups and particularly products against pyorrhea. Pilocarpine used for dry mouth is classified here.	

A1B	MOUTH ANTIFUNGALS	I1999
	Includes topical oral forms of products eg pastilles, gels for fungal infections of the mouth (oral cavity). Also includes other forms eg oral suspensions when these are mainly used for fungal infections of the mouth.	

A2	ANTACIDS, ANTIFLATULENTS AND ANTI-ULCERANTS	
A2A	ANTACIDS, ANTIFLATULENTS, CARMINATIVES	
A2A1	Plain antacids	r2018
	Includes combinations of two or more antacid substances as well as skimmed-milk powder and milk complexes with pure antacid combinations. Stomach teas are classified in A2X. Includes combinations with alginic acid. Alka Seltzer is classified in N2B when it contains an analgesic. If it contains only an antacid, it is classified here.	
A2A2	Plain antiflatulents and carminatives	R1994
	This group includes mainly dimethicone/simethicone (dimethylpolysiloxane, DMPS) preparations. Carminatives and herbal combinations are classified in A2A7 except carminatives with a choleretic or cholagogue effect which are classified in A5A. Dimethicone/simethicone preparations with enzymes are classified in A9A.	
A2A3	Antacids with antispasmodics	
	Distinguishing between antispasmodics and ulcer therapy is often difficult but products with a substance with known antispasmodic properties are included in this group.	
A2A4	Antacids with antiflatulents or carminatives	
	Includes combinations of plain antacids with antiflatulents or carminatives.	
A2A5	Antacids with antiflatulents and/or carminatives and antispasmodics	
	Products in this group should contain an antacid and an antispasmodic together with an antiflatulent or a carminative or both.	
A2A6	Antacids with other drugs	R2002
	Includes antacid combinations other than those classified in A2A3, A2A4 and A2A5. Specific anti-ulcerants are classified in A2B. Alka-Seltzer is classified in N2B or A2A1. Combinations of low dose H2 antagonists with antacids are classified here.	
A2A7	Antiflatulents and/or carminatives with other drugs	r2011
	Includes all antiflatulents and/or carminative combinations not included in A2A4, A2A5, A9A. Combinations of antispasmodics with antiflatulents are classified in A3E.	

A2B	ANTIULCERANTS	r2020
	Combinations of specific antiulcerants with other substances, such as anti-infectives against <i>Helicobacter pylori</i> , antispasmodics, gastroprokinetics, that are for ulcers, gastro-oesophageal reflux disease or similar conditions are classified according to the antiulcerant substance. For example, proton pump inhibitors in combination with these anti-infectives are classified in A2B2. Combinations of antiulcerants with non-steroidal anti-inflammatories where the antiulcerant is present for gastric protection are classified in M1A1.	
A2B1	H2 antagonists	R2002
	Includes, for example, cimetidine, famotidine, nizatidine, ranitidine, roxatidine. Combinations of low dose H2 antagonists with antacids are classified with antacids in A2A6.	
A2B2	Proton pump inhibitors	r2021
	Includes esomeprazole, lansoprazole, omeprazole, pantoprazole, rabeprazole. Combinations of proton pump inhibitors with gastroprokinetics for ulcers, gastro-oesophageal disease or similar conditions are classified here. Includes potassium-competitive acid blockers (P-CABs) such as revaprazan, tegoprazan, vonoprazan, etc.	
A2B3	Prostaglandin antiulcerants	
	Includes misoprostol, enprostil.	
A2B4	Bismuth antiulcerants	
	Includes combinations with antacids.	
A2B9	All other antiulcerants	r2020
	Includes all other products containing substances with antiulcerant action where the type of substance is not specified in classes A2B1 to A2B4. Combinations of antiulcerants with antispasmodics are classified in A2B1 to A2B9 according to the type of antiulcerant. Combinations of low dose H2 antagonists with antacids are classified with antacids in A2A6. Included are, eg carbenoxolone, gefarnate, pirenzepine, proglumide, sucralfate and sofalcone. Herbal combinations are classified in A2X.	
	In Japan, Korea and Taiwan only, sulpiride and other psycholeptics indicated for ulcer use are also included in this group, whilst in all other countries, these compounds are classified in N5A9.	
	Products containing rebamipide for gastric mucosal protection are classified here. Products containing rebamipide and indicated for dry eye are classified in S1K9.	

A2C	Out of use	D2018	
A2X	OTHER STOMACH DISORDER PRODUCTS	I2018	
	Includes herbal preparations and also plain alginic acid. Combinations of antacids with alginic acid are in A2A1.		

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	r2020
	Includes all other combinations not specified in A3C, A3D and A3F. Combinations of antispasmodics and antacids are classified in A2A3; combinations of antispasmodics with antiulcerants are classified in A2B1 to A2B9 according to the type of antiulcerant. Combinations of antispasmodics with antiflatulents are classified here.	
A3F	GASTROPROKINETICS	r2020
	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. Combinations of gastroprokinetics with antiulcerants for ulcers, gastro-oesophageal disease or similar conditions are classified in A2B.	

#### A3G GASTRO-INTESTINAL SENSORIMOTOR MODULATORS

r2019

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.

A4	ANTIEMETICS AND ANTINAUSEANTS	
A4A	ANTIEMETICS AND ANTINAUSEANTS	R1996
	Products indicated for vertigo and Meniere's disease are classified in N7C. Gastroprokinetics are classified in A3F.	
A4A1	Serotonin antagonist antiemetics/antinauseants	r2016
	This class includes granisetron, ondansetron, palonosetron, tropisetron. Combinations of serotonin antagonists with NK1 antagonists are classified in A4A2.	
A4A2	NK1 antagonist antiemetics/antinauseants	I2016
	Includes products containing eg aprepitant, fosaprepitant, netupitant, rolapitant. Combinations of NK1 antagonists with serotonin antagonists are classified here.	
A4A9	Other antiemetics and antinauseants	I1996
	Includes eg cerium oxalate, metopimazine, scopolamine.	

CHOLAGOGUES AND HEPATIC PROTECTORS	
BILE THERAPY AND CHOLAGOGUES	
Choleretics and cholekinetics	
Includes products, plain and in combination, indicated as choleretics and cholekinetics.	
Bile stone therapy	r2018
Includes products indicated for biliary conditions such as stone dissolvers eg chenodesoxycholic acid, ursodesoxycholic acid. Products containing ursodesoxycholic acid for primary biliary cholangitis are classified here.	
Other bile therapy and cholagogues	I2018
Includes products containing obeticholic acid for primary biliary cholangitis.	
HEPATIC PROTECTORS, LIPOTROPICS	
Includes hepatic protectors and combinations, but excludes liver extracts indicated for the treatment of anaemia, which are classified in B3B.	
CHOLAGOGUE/LIPOTROPIC COMBINATIONS	
	BILE THERAPY AND CHOLAGOGUES  Choleretics and cholekinetics  Includes products, plain and in combination, indicated as choleretics and cholekinetics.  Bile stone therapy  Includes products indicated for biliary conditions such as stone dissolvers eg chenodesoxycholic acid, ursodesoxycholic acid. Products containing ursodesoxycholic acid for primary biliary cholangitis are classified here.  Other bile therapy and cholagogues  Includes products containing obeticholic acid for primary biliary cholangitis.  HEPATIC PROTECTORS, LIPOTROPICS  Includes hepatic protectors and combinations, but excludes liver extracts indicated for the treatment of anaemia, which are classified in B3B.

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	r2019
	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.	

A6B	BOWEL CLEANSERS	I2013
	Includes products specifically for bowel cleansing prior to surgery or an investigative procedure.	
A6B1	Osmotic bowel cleansers	I2013
	Includes products that contain osmotic laxatives and are for bowel cleansing prior to surgery or an investigative procedure. Combinations of an osmotic laxative with a stimulant, when used as a bowel preparation, are classified here.	
A6B2	Osmotic bowel cleansers with electrolytes	I2013
	Includes products that contain osmotic laxatives in combination with electrolyte substances and are for bowel cleansing prior to surgery or an investigative procedure. These specific electrolytes are present to ensure a neutral impact on electrolyte levels. Bowel cleansers with electrolytes and that contain both an osmotic laxative and a stimulant laxative are classified here.	
A6B9	Other bowel cleansers	I2013
	Includes other products for bowel cleansing prior to surgery or an investigative procedure.	

A7	INTESTINAL DISORDER PRODUCTS	r2019
	Products for functional gastro-intestinal disorders are in A3 and products for constipation and bowel cleansing are in A6.	
A7A	INTESTINAL ANTI-INFECTIVES	r2019
	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 <i>Clostridium difficile</i> intestinal infections are classified here.	
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.	
<b>A7</b> 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	r2019
	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.	
	Darvadstrocel (allogenic stem cells) for perianal fistulae in Crohn's disease are classified here.	
<b>A7</b> F	ANTIDIARRHOEAL MICRO-ORGANISMS	r2020
	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. Products containing racecadotril are classified in A7X.	
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.	
<b>A7</b> H	MOTILITY INHIBITORS	I1993
	Includes narcotic derivatives such as loperamide, diphenoxylate and paregoric. Combinations with intestinal adsorbents and micro-organisms are also included.	
A7X	INTESTINAL DISORDER PRODUCTS, OTHER	r2020
	Includes other products for intestinal disorders, including antidiarrhoeal products. Products containing racecadotril only, or in combination with micro-organisms, are classified here.	

# A8 ANTIOBESITY PREPARATIONS, EXCLUDING DIETETICS

#### A8A ANTIOBESITY PREPARATIONS, EXCLUDING DIETETICS

r2016

Includes all centrally- and peripherally-acting substances indicated for obesity, eg amphetamines, cannabinoid receptor antagonists (CB1), and lipase inhibitors. Combinations of these substances with laxatives or dietetics are included in A8A when the specific indication is obesity. Herbal products are also included. This class excludes dietary products (nutrients) used to aid in weight reduction (see V6A). Chitin-based products are classified in V6A when used in weight reduction.

Combinations of anti-obesity drugs with antidiabetics where the aim is to treat both the diabetes and the obesity are classified in A10X1.

Products containing liraglutide for weight management only are classified here. Products containing liraglutide for diabetes are classified in A10.

# A9 DIGESTIVES, INCLUDING ENZYMES

r2017

# A9A 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.

A10	DRUGS USED IN DIABETES	R1993
A10A	Out of use; can be reused from 2001.	D1998
A10B	Out of use; can be reused from 2012.	D2009
A10C	HUMAN INSULINS AND ANALOGUES	I1998
A10C1	Human insulins and analogues, fast-acting	R2007
	Includes human soluble insulin (neutral insulin) and insulin lispro. Includes inhaled forms of insulin.	
A10C2	Human insulins and analogues, intermediate-acting	I1998
	Includes human isophane insulin (NPH) and human amorphous insulin zinc suspension (semi-lente).	
A10C3	Human insulins and analogues, intermediate- or long-acting, combined with fast-acting	R2016
	Includes combinations of human isophane with human soluble insulins (biphasic isophane insulin). Includes combinations of insulin degludec with insulin aspart.	
A10C4	Human insulins and analogues, intermediate-acting combined with long-acting	I1998
	Includes fixed combinations of human crystalline insulin suspension 70% with human amorphous insulin zinc suspension 30% (lente).	
A10C5	Human insulins and analogues, long-acting	r2013
	Includes human crystalline insulin zinc suspension (ultra-lente) and insulin degludec.	
A10C9	Other human insulins and analogues	r2016
	Combinations of human insulins or analogues with GLP-1 agonist antidiabetics are classified here.	
A10D	ANIMAL INSULINS	I1998
A10E	INSULIN DEVICES	I1998
	Only those products which do not contain any active ingredients but are used to administer insulin, are classified in this group.	

A10H	SULPHONYLUREA ANTIDIABETICS	I2009
	Includes plain products containing chlorpropamide, glibenclamide, glibornuride, gliclazide, glimepiride, tolbutamide, etc. For combinations of sulphonylureas with other antidiabetics, use the most appropriate specific combination class. For combinations with vitamins only, classify as plain sulphonylureas.	
A10J	BIGUANIDE ANTIDIABETICS	I2009
A10J1	Biguanide antidiabetics, plain	I2009
	Includes plain products containing buformin, metformin, phenformin, etc.	
A10J2	Biguanide and sulphonylurea antidiabetic combinations	I2009
	Includes combinations of biguanides with sulphonylureas.	
A10J9	Biguanide antidiabetic combinations, other	I2009
	Includes combinations of biguanides with other antidiabetics where there is no other appropriate class. For combinations with vitamins only, classify as plain biguanides.	
A10K	GLITAZONE ANTIDIABETICS	I2009
A10K1	Glitazone antidiabetics, plain	I2009
	Includes plain products containing pioglitazone, rosiglitazone, troglitazone, etc.	
A10K2	Glitazone and sulphonylurea antidiabetic combinations	I2009
	Includes combinations of glitazones with sulphonylureas.	
A10K3	Glitazone and biguanide antidiabetic combinations	I2009
	Includes combinations of glitazones with biguanides.	
A10K9	Glitazone antidiabetic combinations, other	I2009
	Includes combinations of glitazones with other antidiabetics where there is no other appropriate class. Combinations of a glitazone with a biguanide and also a sulphonylurea are classified in A10K9. Combinations of a glitazone with a biguanide and also a DPP-IV inhibitor are classified in A10N9.	
A10L	ALPHA-GLUCOSIDASE INHIBITOR ANTIDIABETICS	I2009
	Includes plain products containing acarbose, miglitol, voglibose, etc.	

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	12009
	Includes combinations of DPP-IV inhibitors with biguanides.	
A10N9	DPP-IV inhibitor antidiabetic combinations, other	r2020
	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. Combinations of a DPP-IV inhibitor with an SGLT2 inhibitor and a biguanide are classified in A10P9.	
A10P	SGLT2 INHIBITOR ANTIDIABETICS	R2016
A10P1	SGLT2 inhibitor antidiabetics, plain	r2022
	Includes plain products containing SGLT2 inhibitors, eg canagliflozin, dapagliflozin, empagliflozin, etc. Products containing SGLT2 inhibitors for diabetes and also for heart failure and/or chronic kidney disease are classified here.	
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.	
L	I .	

A10P9	SGLT2 inhibitor antidiabetic combinations, other	r2020
	Includes combinations of SGLT2 inhibitors with other oral antidiabetics where there is no other appropriate class. Combinations of an SGLT2 inhibitor with a DPP-IV inhibitor and a biguanide are classified here.	
A10S	GLP-1 AGONIST ANTIDIABETICS	r2022
	Includes glucagon-like peptide 1 receptor agonist antidiabetics, eg exenatide, liraglutide, lixisenatide. Combinations of GLP-1 agonist antidiabetics with human insulins or analogues are classified in A10C9.	
	Products containing oral forms of GLP-1 agonists for diabetes are classified here.	
	Products containing tirzepatide, a dual GIP and GLP-1 agonist, for diabetes are classified here.	
	Products containing liraglutide for weight management only are classified in A8A.	
A10X	OTHER DRUGS USED IN DIABETES	R2010
A10X1	Antidiabetic multitherapy combination products	I2010
	Includes combinations of antidiabetics with cardiovascular drugs where the aim is to treat both the diabetes and the cardiovascular condition. For example, rosiglitazone in combination with simvastatin. Also includes combinations of antidiabetics with anti-obesity drugs where the aim is to treat both the diabetes and the obesity. For example, metformin in combination with sibutramine.	
A10X9	Other drugs used in diabetes	I2010
	Includes products used for the treatment of diabetes, as well as adjuvant therapy in the treatment and prevention of conditions associated with or developing from diabetes.	
	Includes aldose reductase inhibitors (eg epalrestat, tolrestat), guar gum and glucose products specifically intended for the treatment of hypoglycaemic shock.	
	Teas and other herbal extracts used as adjuvant therapy are classified here.	

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.	

A11B	MULTIVITAMINS WITHOUT MINERALS	R2003
	Includes all multivitamin combinations as defined under A11A but without minerals, except all oral preparations containing procaine (see A13A1). Products for general well-being are classified in A13A.	
A11B1	Prenatal	R1993
	Includes those products specifically indicated for vitamin supplementation during pregnancy or lactation.	
A11B2	Paediatric	
	Analogous to A11A2 but without minerals.	
A11B3	Geriatric	
	Analogous to A11A3 but without minerals (see also A14A2).	
A11B4	Other multivitamins without minerals	
A11C	VITAMIN A AND D, INCLUDING COMBINATIONS OF THE TWO	
A11C1	Vitamin A	
	Includes combinations of vitamin A with vitamin E, but excludes combinations of vitamin A with vitamin D (see A11C3).	
A11C2	Vitamin D	r2021
	Excludes combinations of vitamin D with vitamin A (see A11C3).	
	Products containing vitamin D or its analogues with multiple indications are classified here. Products only for secondary hyperparathyroidism are classified in H4F. Cinacalcet is classified in H4F.	
	Products containing vitamin D that are mainly for vitamin D deficiency but also contain minerals (for example, magnesium) are classified here. Products containing both vitamin D and calcium (with and without other minerals) for osteoporosis or calcium deficiency are classified in A12A.	
	Products containing vitamin D with vitamin E (with and without minerals) are classified here. Products containing vitamin D with vitamin E and with calcium (with and without other minerals) for osteoporosis or calcium deficiency are classified in A12A.	

A11C3	Combinations of vitamin A with vitamin D	R2003
	Products containing halibut or cod liver oil are included in this group. Combinations of vitamin A and/or vitamin D with other vitamins are classified as multivitamins in A11A or A11B.	
A11D	VITAMIN B1 AND COMBINATIONS	R2003
	For vitamin B complex, see A11E.	
A11D1	Out of use; can be reused from 2006.	D2003
A11D2	Out of use; can be reused from 2006.	D2003
A11D3	Vitamin B1 plain	I2003
	Includes products containing only vitamin B1 (thiamine) or analogues (eg cocarboxylase). Products of this type containing eg lidocaine, glucose, are also classified here.	
A11D4	Vitamin B1 combinations with vitamin B6 and/or vitamin B12	I2003
	Includes vitamin B1 in combination with vitamin B6, vitamin B1 in combination with vitamin B12, and vitamin B1 in combination with both vitamins B6 and vitamin B12. Products of this type containing lidocaine are also classified here.	
A11D9	Other vitamin B1 combinations	I2003
	Includes vitamin B1 products (with or without B6 and/or B12) in combination with other vitamins or substances (excluding vitamin A, or vitamin D). Combinations of B1 and/or B6 and/or B12 with analgesics and mainly indicated for analgesia are usually classified in N2B. Combinations of B1 and/or B6 and/or B12 with anti-inflammatories are usually classified in M1A2. Combinations of B1 and/or B2 and/or B12 with corticosteroids are classified in H2B.	
A11E	VITAMIN B COMPLEX	R2003
	Vitamin B complex contains Vitamin B1 (thiamine), B2 (riboflavine), B6 (pyridoxine) and B12 (cyanocobalamin). In addition, B5 (pantothenic acid), B7 (biotin), B3 (niacinamide) and folic acid can be included. Included are products containing liver extracts, but not those indicated for anaemia (see also B3B).	
	Vitamin B complex with vitamin A or vitamin D is classified in A11A or A11B.	
	For other vitamin B1 products, see A11D.	
A11E1	Plain vitamin B complex	R2004
	Includes dried yeast.	

A11E2	Vitamin B complex with vitamin C	R2003
	Includes vitamin B complex combinations with vitamin C only, except when they contain other drugs as well (see A11E3).	
A11E3	Vitamin B complex with other drugs	R1998
	Includes products containing vitamin B complex and other components, with or without vitamin C.	
A11F	PLAIN VITAMIN B12	R2003
	This group contains plain vitamin B12 (cyanocobalamin, hydroxocobalamin) products, with or without lidocaine. Combinations with other substances are classified in either A11A, A11B, A11D, A11E, A11X9, B3B or B3X.	
A11G	VITAMIN C, INCLUDING COMBINATIONS WITH MINERALS	
A11G1	Plain vitamin C (including vitamin C salts)	
A11G2	Vitamin C combinations	R2003
	Products of this group include vitamin C with other components, but products with calcium salts for the therapy of calcium deficiency or osteoporosis are classified in A12A. When in doubt the calcium component takes precedence over the other ingredients.	
	Combinations of vitamin C with other vitamins are classified in A11A, A11B, A11D9, A11E2, A11E3 and A11X9. If combined with only one vitamin, and possibly other substances, A11X9 is appropriate.	
A11H	Out of use; can be reused.	
A11J	Out of use; can be reused from 2005.	D2002
A11X	OTHER VITAMINS	12002
A11X1	Nicotinamide (vitamin B3), plain	R2003
	Includes products containing nicotinamide (vitamin PP).	
A11X2	Vitamin B6 (pyridoxine), plain	12002
	Pyrithioxine products are included in N6D.	
A11X3	Vitamin E, plain	12002
	Combinations with vitamin A are in A11C1. Vitamin E products with wheatgerm are classified here.	

# A11X9 | All other vitamins, plain and in combination

r2021

Includes all other vitamin products such as pantothenic acid, riboflavine (vitamin B2) and para-aminobenzoic acid (PABA). Vitamin K is classified in B2B, and vitamin P in C5C.

Includes all vitamin B combinations without vitamin B1 when they do not contain vitamin A or vitamin D.

Vitamin B2 with vitamin B6 is classified here.

Vitamin B1 with vitamin B2 is classified in A11D9.

Products containing vitamin D that are mainly for vitamin D deficiency but also contain minerals (for example, magnesium) are classified in A11C2. Products containing both vitamin D and calcium (with and without other minerals) for osteoporosis or calcium deficiency are classified in A12A.

Products containing vitamin D in combination with vitamin E (with and without minerals) are classified in A11C2. Products containing vitamin D with vitamin E and with calcium (with and without other minerals) for osteoporosis or calcium deficiency are classified in A12A.

A12	MINERAL SUPPLEMENTS	
A12A	CALCIUM PRODUCTS	r2021
	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.	
	Products containing both vitamin D and calcium (with and without other minerals) for osteoporosis or calcium deficiency are classified here. Products containing vitamin D with vitamin E and with calcium (with and without other minerals) for osteoporosis or calcium deficiency are classified here.	
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	

A13	TONICS	
A13A	TONICS	R2003
	Products for general well-being are classified here.	
A13A1	Preparations containing procaine	
	This group includes all oral preparations containing procaine which are indicated for geriatrics.	
A13A2	All other tonics	
	Herbal tonics are included in this class. Anti-anaemics are classified in B3.	

A14	ANABOLICS, SYSTEMIC	
A14A	ANABOLIC HORMONES, SYSTEMIC	
A14A1	Plain anabolic hormones, systemic	
	This group does not include anti-cancer products (L1).	
A14A2	Anabolic hormone combinations	
	Vitamin and mineral combinations with anabolic hormones, predominant in the geriatric field, are classified in A11A3 or A11B3 (see comment in those groups).	
A14B	OTHER ANABOLIC AGENTS, SYSTEMIC	
	Includes all other anabolic agents.	

A15	APPETITE STIMULANTS	
A15A	APPETITE STIMULANTS	R2003
	Includes products of the cyproheptadine group, buclizine, and pizotifen when indicated as appetite stimulants.	

A16	OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS	
A16A	OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS	r2021
	Includes all alimentary tract and metabolism products not classified elsewhere. Oral preparations containing procaine are classified in A13A1.	
	Products containing one or more oral antidiabetic substances in combination with one or more substances from a cardiovascular class where the aim is to treat both the diabetes and the cardiovascular condition are classified in A10X1.	
	Products containing teduglutide for short bowel syndrome are classified here.	
	Products containing elapegademase or pegademase for severe combined immunodeficiency disease (SCID) associated with a deficiency of adenosine deaminase are classified in L3A9.	

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	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 prourokinase (a precursor form of urokinase).	
B1E	DIRECT THROMBIN INHIBITORS	I2004
	Includes argatroban, bivalirudin, desirudin, lepirudin, melagatran, ximelagatran.	
B1F	DIRECT FACTOR XA INHIBITORS	r2019
	Includes products containing direct factor Xa inhibitors, eg apixaban, betrixaban, edoxaban, rivaroxaban.	

B1X	OTHER ANTITHROMBOTIC AGENTS	r2022
	Includes danaparoid, dermatan sulphate, activated protein C (drotrecogin alpha, activated), fondaparinux, <i>Ligustrum lucidum</i> , pentosan polysulphate sodium, poloxalkol, protein C. Products containing caplacizumab for acquired thrombotic thrombocytopenic purpura are classified here.	

B2	BLOOD COAGULATION SYSTEM, OTHER PRODUCTS	r2008
B2A	ANTIFIBRINOLYTICS	
B2A1	Synthetic antifibrinolytics	
	Includes inhibitors of fibrinolytic activity such as epsilon - aminocaproic acid (EACA), para-aminomethylbenzoic acid (PAMBA) and tranexamic acid (AMCHA).	
B2A2	Proteinase	
B2A9	Other antifibrinolytics	
B2B	ANTAGONISTS (ANTIDOTES TO ANTICOAGULANTS)	
B2B1	Vitamin K	
	Essential for the formulation of prothrombin complex factors in the liver.	
B2B2	Protamin sulphate	
	Neutralises the effect of heparin.	
B2B9	Antidotes to anticoagulants, other	I2016
	Includes idarucizumab, andexanet alfa.	
B2C	PROTEINASE INHIBITORS	
B2C1	Coagulation inhibitors	
	Includes coagulation inhibitors eg antithrombin III.	
B2C2	Inhibitors of the Kallikrein-kinin-system	R2015
	Includes products containing eg camostat, gabexate, nafamostat. Products for hereditary angioedema are classified in B6D.	
B2C3	Inhibitors of fibrinolysis	
	Includes aprotinin.	
B2C9	Other proteinase inhibitors	r2013
	Products containing alpha-1-proteinase inhibitor are classified in R3X2.	

B2D	BLOOD COAGULATION PRODUCTS	r2022
B2D1	Factor VIII, including substitutes	r2019
	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	r2021
	Includes products containing thrombopoietin agonists, such as eltrombopag and romiplostim.	
	Products containing oprelvekin for the prevention of severe thrombocytopenia are classified in B6X.	
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	r2019
	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.	

В3	ANTI-ANAEMIC PREPARATIONS	
B3A	HAEMATINICS, IRON AND ALL COMBINATIONS	
	Any products which contain iron, irrespective of other ingredients (for example, folic acid, vitamin B12, etc.) are classified in B3A.	
B3A1	Plain iron	
	This class also includes preparations containing ingredients for better absorption and/or reducing agents, such as ascorbic acid, as well as combinations with cobalt.	
B3A2	Iron combination products	R1993
	Includes all other iron combinations including those containing liver extract and/or folic acid.	
взв	LIVER EXTRACTS AND COMBINATIONS WITH B12	
	Includes liver extracts, excluding all preparations not used for anaemia. Oral B12 with intrinsic factor allocated is classified in B3B.	
взс	ERYTHROPOIETIN PRODUCTS	R1995
B3D	HIF-PH INHIBITORS	I2020
	Includes products containing HIF-PH (hypoxia-inducible factor prolyl hydroxylase) inhibitors (for example, daprodustat, enarodustat, molidustat, roxadustat, vadadustat, etc) for the treatment of anaemia in chronic kidney disease.	
взх	OTHER ANTI-ANAEMIC PRODUCTS, INCLUDING FOLIC ACID, FOLINIC ACID	R2005
	Folinic acid products with more than one indication are classified in V3D.	

B4	Out of use; can be reused from 2000. The B4 class was transferred to C10.	D1997

B5	Out of use; can be reused. Group B5 discontinued. See group K.	

B6	ALL OTHER HAEMATOLOGICAL AGENTS	R1996
B6A	Out of use; can be reused from 1999.	D1996
B6B	HYALURONIDASE	
B6C	Out of use	D2020
B6D	HEREDITARY ANGIOEDEMA PRODUCTS	I2015
	Includes products containing eg C1 inhibitor/conestat alfa, ecallantide, icatibant, etc when indicated for hereditary angioedema.	
B6X	OTHER HAEMATOLOGICAL AGENTS	r2021
	Includes haemins. Excluded are those preparations used in the treatment of veins and haemorrhoids (C5) and preparations for dermatological use (D3A).	
	Products containing oprelvekin for the prevention of severe thrombocytopenia are classified here.	

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	r2020
	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).	
	Products containing mexiletine for cardiac arrhythmias are classified here; products containing mexiletine for non-dystrophic myotonic disorders are classified in M5X.	
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.	

### C<sub>1</sub>D CORONARY THERAPY EXCLUDING CALCIUM ANTAGONISTS AND R2007 **NITRITES** This group includes all other products indicated for coronary insufficiency and angina pectoris. It includes benziodarone, capobenic acid, carbocromen, cinepazet, cinepazic acid, cloridarol, dilazep, dipyridamole, efloxate, etafenone, fenalcomine, flosequinan, hexobendine, imolamine, ivabradine, medibazine, molsidomine, oxyfedrin, trimetazidine, visnadine. Combinations with nitrites are included in C1E and with beta-blockers are included in C7B. C<sub>1</sub>E **NITRITES AND NITRATES** This group includes all nitrites and analogous products and combinations if they are indicated for angina pectoris. Combinations of nitrites with cardiac glycosides are classified in C1A2 and combinations with beta-blockers in C7B. C<sub>1</sub>F POSITIVE INOTROPIC AGENTS R1994 This group includes substances such as amrinone, milrinone, fenoximone, piroximone, xamoterol. C1X ALL OTHER CARDIAC PREPARATIONS r2021 This group includes substances such as alprostadil, crateagus glycosides, phosphocreatinine, creatinolphosphate, levocarnitine and ubidecarenone. Combination products are only classified in this group if they contain a substance which is not in the C group. Products containing alprostadil for peripheral arterial occlusive disease only are classified in C4A1. Products containing alprostadil for erectile dysfunction only are classified in G4E9. Products containing alprostadil for patent ductus arteriosus only or for multiple indications are classified here. Products containing tafamidis for transthyretin amyloid polyneuropathy (TAP) only are classified in N7X. Products containing tafamidis for transthyretin amyloid cardiomyopathy (TAC) only are classified here. Products containing tafamidis for both TAP and TAC are classified in N7X.

#### **C2 ANTIHYPERTENSIVES** r2014 Note: Beta-blocking agents, whether plain or in combination, are classified in group Calcium antagonists with antihypertensive, and/or anti-angina action are classified in group C8. ACE inhibitors and angiotensin II antagonists are classified in group C9. **Alkaloids** Peripherally acting Aimalicine betanidine Alkavervir bufenoide Bietaserpine bunazosin Cryptenamine cicletanine Deserpidine debrisoquine Methoserpidine diazoxide Protoveratrine A dihydralazine Protoveratrine B ecarazine Rauwolfia serpentina endralazine Rauwolfia vomitoria guabenxan Rescinnamine guanadrel Reserviline guanethidine Reserpine guanoxan Sarpagine hexamethonium hydroxide Serpentine hydracarbazine Spirgentine hydralazine Syrosingopine indoramin White veratrum ketanserin mecamylamine metirosine minoxidil nitroprusside Centrally acting Clonidine pargyline Guanabenz pempidine Guanfacine penthamethonium hydroxide Guanoxabenz pentolonium picodralazine Lofexidine prazosin Mebutamate Methyldopa primaperone Moxonidine todralazine Tolonidine trimethaphan urapidil

Products containing terazosin, for BPH or hypertension, are classified in G4C2.

C2A	ANTIHYPERTENSIVES (OF NON-HERBAL ORIGIN) PLAIN	
	It includes plain antihypertensives and combinations other than those with diuretics, eg combinations of two synthetic antihypertensives or combinations of one synthetic antihypertensive with reserpine.	
C2A1	Antihypertensives plain, mainly centrally acting	
C2A2	Antihypertensives plain, mainly peripherally acting	r2015
	Includes products containing doxazosin. Products containing indoramin alone are classified here unless the indication is migraine in which case they are classified in N2C9.	
C2A3	Antihypertensives plain, others	R1996
C2B	ANTIHYPERTENSIVES (OF NON-HERBAL ORIGIN), COMBINATION WITH DIURETICS	
C2B1	Antihypertensive-diuretic combinations, mainly centrally acting	
C2B2	Antihypertensive-diuretic combinations, mainly peripherally acting	
C2B3	Antihypertensive-diuretic combinations, others	
C2C	RAUWOLFIA ALKALOIDS AND OTHER ANTIHYPERTENSIVES OF HERBAL ORIGIN	
C2D	RAUWOLFIA ALKALOIDS AND OTHER ANTIHYPERTENSIVES OF HERBAL ORIGIN IN COMBINATION WITH DIURETICS	

C3	DIURETICS	
C3A	DIURETICS	
	Combinations with potassium belong to C3A1, C3A2 or C3A3.	
C3A1	Potassium-sparing agents plain	
	This group includes all products containing amiloride, triamterene and spironolactone (canrenoic acid) plain.	
C3A2	Loop diuretics plain	r2008
	This group includes all products containing bumetanide, etacrynic acid, etozolin, furosemide, muzolimine, piretanide plain.	
C3A3	Thiazides and analogues plain	r2008
	This group includes all products containing thiazides, eg altizide, bendroflumethiazide, benzylhydrochlorothiazide, butizide, chlorothiazide, cyclopenthiazide, flumethiazide, hydrochlorothiazide, mebutizide, paraflutizide, teclothiazide, trichlormethiazide and analogues (which act similar to thiazides) eg chlortalidone, clopamide, indapamide, mefruside, tienilic acid, xipamide, tripamide, metolazone, quinethazone, clorexolone and meticrane.	
C3A4	Potassium-sparing agents with loop diuretic combinations	
C3A5	Potassium-sparing agents with thiazides and/or analogue combinations	
C3A6	Out of use; can be reused from 2014.	D2011
C3A7	Vasopressin receptor antagonist diuretics	I2011
	Includes products containing vasopressin receptor antagonists such as conivaptan, mozavaptan and tolvaptan.	
C3A9	Other diuretics	r2021
	Includes eg carboanhydrase inhibitors such as clofenamide and diclofenamide (when not used for the treatment of glaucoma or primary periodic paralysis), diuretics of vegetable origin etc, ethoxazolamide, isosorbide, mannitol, chlorazanil; mercury salts are also included in this group.	
	Products containing diclofenamide for primary periodic paralysis are classified in M5X. Products containing diclofenamide for glaucoma are classified in S1E1.	

C4	CEREBRAL AND PERIPHERAL VASOTHERAPEUTICS	
C4A	CEREBRAL AND PERIPHERAL VASOTHERAPEUTICS	R2005
	This group includes all products (including citicoline) which are mainly recommended for cerebral vascular diseases or peripheral circulatory disorders excluding venous diseases. Combination products are only classified in this group if they do not belong to group C1-C3, C7-C11.	
C4A1	Cerebral and peripheral vasotherapeutics excluding calcium antagonists with cerebral activity	r2021
	Products containing phenoxybenzamine alone, and indicated either for hypertension or BPH are classified here. Products containing cinepazide alone and for vasodilation are classified here. Products containing beperminogene perplasmid for improvement of limb ischaemia are classified here. Products containing alprostadil for peripheral arterial occlusive disease only are classified here. Products containing alprostadil for erectile dysfunction only are classified in G4E9. Products containing alprostadil for patent ductus arteriosus only or for multiple indications are classified in C1X.	
C4A2	Calcium antagonists with cerebral activity	R1993
	Includes, bencyclane, cinnarizine, cyclandelate, flunarizine and nimodipine.	

C5	ANTIVARICOSIS/ANTI-HAEMORRHOIDAL PREPARATIONS	
C5A	TOPICAL ANTI-HAEMORRHOIDALS	r2014
	Topical products to treat anal fissures are classified here.	
C5A1	Topical anti-haemorrhoidals with corticosteroids	
	This group includes all products which are used mainly for the topical treatment of haemorrhoids and which contain corticosteroids.	
C5A2	Topical anti-haemorrhoidals without corticosteroids	
	This group includes all products which are used mainly for the topical treatment of haemorrhoids (excluding C5A1). Products designed to shrink haemorrhoids are also classified in this group.	
C5B	VARICOSE THERAPY, TOPICAL	
	This group includes all products which are predominantly used for the topical treatment of varicose veins. Products designed to shrink varicose veins are also classified here.	
C5C	VARICOSE THERAPY, SYSTEMIC	
	This group includes all products which are used for the systemic treatment of varicose veins and recommended for the treatment of diseases of the veins. Systemic anti-haemorrhoidals are also classified in this group.	

<b>C6</b>	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-C6B 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.	

C7	BETA-BLOCKING AGENTS	
C7A	BETA-BLOCKING AGENTS, PLAIN	r2014
	Includes, eg acebutolol, alprenolol, amosulalol, arotinolol, atenolol, befunolol, betaxolol, bevantolol, bisoprolol, bopindolol, bucumolol, bufetolol, bunitrolol, bupranolol, butofilolol, carazolol, carteolol, carvedilol, celiprolol, cloranolol, dilevalol, esmolol, indenolol, labetolol, levobunolol, mepindolol, metipranolol, metoprolol, nadolol, nifenalol, nipradilol, oxprenolol, penbutolol, pindolol, practolol, propranolol, sotalol, tertatolol, tilisolol, timolol, toliprolol.	
	Also includes substances which partly block the beta-receptors (eg labetalol). Oral propranolol for infantile haemangioma is classified here.	
С7В	BETA-BLOCKING AGENTS, COMBINATIONS	
	Combinations of beta-blockers with calcium antagonists are classified in C8B2 and combinations with ACE inhibitors are classified in C9B2.	
C7B1	Combinations with antihypertensives and/or diuretics	r2008
	Includes beta-blockers combined with drugs in group C2 (antihypertensives) or C3 (diuretics).	
C7B2	Combinations with other drugs of group C	r2008
	Includes beta-blockers combined with all other drugs in group C, excluding C2 (antihypertensives), C3 (diuretics), C8 (calcium antagonists) and C9 (ACE inhibitors and angiotensin II antagonists). For combinations with C10 substances, see C11.	
C7B3	Combinations with all other drugs except those of group C	r2010
	For combinations with substances in A10 (diabetes) see A10X1.	

C8	CALCIUM ANTAGONISTS	R1997
	Note: Calcium antagonists with cerebral activity (calcium overload blockers) are classified in group C4A2.	
	This group C8 includes eg amlodipine, aranidipine, benidipine, bepridil, diltiazem, felodipine, fendiline, gallopamil, isradipine, lacidipine, lercanidipine, lidoflazine, manidipine, nicardipine, nifedipine, nilvadipine, nisoldipine, nitrendipine, perhexiline, prenylamine, verapamil.	
C8A	CALCIUM ANTAGONISTS, PLAIN	
C8B	CALCIUM ANTAGONISTS, COMBINATIONS	
C8B1	Calcium antagonist combinations with antihypertensives (C2) and/or diuretics (C3)	
C8B2	Calcium antagonist/beta-blocker combinations	r2008
	In addition, the product can contain a diuretic.	
C8B3	Calcium antagonist combinations with all other drugs of group C except C2, C3, C7 and C9.	r2008
	For combinations with C10 substances, see C11.	
C8B4	Calcium antagonist combinations with all other drugs except those of group C	r2010
	For combinations with substances in A10 (diabetes) see A10X1.	

C9	AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM	R1996
C9A	ACE INHIBITORS, PLAIN	R1996
	Angiotensin-Converting-Enzyme inhibitors. It includes eg alacepril, benazepril, captopril, cilazapril, delapril, enalapril, fosinopril, imidapril, lisinopril, moexipril, perindopril, quinapril, ramipril, spirapril, temocapril, trandolapril.	
С9В	ACE INHIBITORS, COMBINATIONS	
C9B1	ACE inhibitor combinations with antihypertensives (C2) and/or diuretics (C3)	R1996
C9B2	ACE inhibitor/beta-blocker combinations	r2008
	In addition, the product can contain a diuretic.	
C9B3	ACE inhibitor combinations with calcium antagonists (C8)	r2008
	In addition, the product can contain a diuretic.	
C9B9	ACE inhibitor combinations with all other drugs	r2010
	For combinations with C10 substances, see C11. For combinations with substances in A10 (diabetes), see A10X1.	
C9C	ANGIOTENSIN-II ANTAGONISTS, PLAIN	I1996
C9D	ANGIOTENSIN-II ANTAGONISTS, COMBINATIONS	r2010
	For combinations with C10 substances, see C11. Products in C9D2, C9D3 and C9D4 can also contain a diuretic substance. For example, an angiotensin-II antagonist plus an ACE inhibitor plus a diuretic is classified in C9D4.	
C9D1	Angiotensin-II antagonist combinations with antihypertensives (C2) and/or diuretics	12008
	Includes products containing an angiotensin-II antagonist in combination with an antihypertensive substance (C2). In addition, the product can contain a diuretic.	
C9D2	Angiotensin-II antagonist combinations with beta-blockers	I2008
	Includes products containing an angiotensin-II antagonist in combination with a beta blocker. In addition, the product can contain a diuretic.	

C9D3	Angiotensin-II antagonist combinations with calcium antagonists	I2008
	Includes products containing an angiotensin-II antagonist in combination with a calcium antagonist. In addition, the product can contain a diuretic.	
C9D4	Angiotensin-II antagonist combinations with ACE inhibitors	I2008
	Includes products containing an angiotensin-II antagonist in combination with an ACE inhibitor. In addition, the product can contain a diuretic.	
C9D9	Angiotensin-II antagonist combinations with other drugs	r2016
	Includes products containing an angiotensin-II antagonist in combination with other drugs not specified in the other C9D combination classes or in the C9D guideline. For combinations with substances in A10 (diabetes) see A10X1.	
	Products containing angiotensin-II antagonists in combination with neprilysin inhibitors (eg sacubitril) are classified here.	
С9Х	OTHER AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM	I1996

C10	LIPID-REGULATING/ANTI-ATHEROMA PREPARATIONS	R2005
	Excludes products intended for weight reduction.	
C10A	CHOLESTEROL AND TRIGLYCERIDE REGULATING PREPARATIONS	r2010
	Includes all products regulating cholesterol and triglycerides only. Combinations with products of group C4 should be classified here. Combinations with oral antidiabetic substances are classified in A10X1.	
C10A1	Statins (HMG-CoA reductase inhibitors)	R2006
	Includes atorvastatin, cerivastatin, fluvastatin, lovastatin, pravastatin, rosuvastatin simvastatin.	
	Combinations of statins with ezetimibe are classified in C10C.	
C10A2	Fibrates	I1997
	Includes beclobrate, bezafibrate, ciprofibrate, clofibrate, clofibrate, etofibrate, fenofibrate, gemfibrozil, simfibrate.	
C10A3	Ion-exchange resins	I1997
	Includes cholestyramine, colestipol, polidexide.	
C10A4	PCSK9 inhibitors	I2016
	Includes proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitors, eg alirocumab, evolocumab.	
C10A9	All other cholesterol/triglyceride regulators	r2021
	Includes ezetimibe, probucol, tiadenol, pyridinolcarbamate and all other products excluding those in C10B.	
	Combinations of ezetimibe with statins or with bempedoic acid are classified in C10C.	
	Nicotinic acid derivatives if indicated in this area are classified here, eg acipimox.	
	Products containing volanesorsen for familial chylomicronaemia syndrome (FCS) are classified here.	

## ANTI-ATHEROMA PREPARATIONS OF NATURAL ORIGIN C10B r2021 This class includes products of natural origin used for the prevention and treatment of arteriosclerosis, eg omega-3 fatty acids, garlic preparations, lecithin. Products containing omega-3 fatty acids for the reduction of triglycerides and/or for the prevention and treatment of arteriosclerosis are classified here. Products containing omega-3 fatty acids for other conditions or for multiple uses are classified in V3X. **C10C** LIPID REGULATORS IN COMBINATION WITH OTHER LIPID r2021 **REGULATORS** Includes products containing two or more substances, all of which are lipid regulators. These are combinations of different types of lipid regulator in C10A. For example, products containing a statin in combination with nicotinic acid, or products containing a statin in combination with ezetimibe, are classified here. Products containing ezetimibe with bempedoic acid are classified here. Combinations of a statin with another statin are classified in C10A1. Combinations of a fibrate with another fibrate are classified in C10A2. Combinations of lipid regulators of natural origin with other lipid regulators of natural origin are classified in C10B. Combinations of a lipid regulating substance from C10A together with a substance from C10B (anti-atheroma preparations of natural origin) are also classified in C10C. Products containing one or more oral antidiabetic substances in combination with one or more substances from a cardiovascular class (C) are classified in A10X1. For example, a combination product containing pioglitazone with simvastatin is classified in A10X1.

C11	CARDIOVASCULAR MULTITHERAPY COMBINATION PRODUCTS	r2010
	Products containing cardiovascular substances in combination with oral antidiabetics where the aim is to treat both the diabetes and the cardiovascular condition are classified in A10X1.	
C11A	LIPID-REGULATING CARDIOVASCULAR MULTITHERAPY COMBINATION PRODUCTS	R2006
	Includes products which are indicated for cardiovascular lipid disorders together with at least one other cardiovascular condition, eg hypertension.	
C11A1	Lipid-regulating cardiovascular multitherapy fixed combination products	I2006
	These products contain two or more substances together in a single dosage form, eg a single tablet, capsule etc.	
C11A2	Lipid-regulating cardiovascular multitherapy combi-pack combination products	I2006
	These products contain two or more active substances which are in separate dosage forms eg separate tablets, capsules, etc in one 'packaged' unit.	

D	DERMATOLOGICALS	
D1	ANTIFUNGALS, DERMATOLOGICAL	
D1A	ANTIFUNGALS, DERMATOLOGICAL	
D1A1	Topical dermatological antifungals	r2009
	Includes topical forms of preparations for fungal infections of the skin, whether in the form of plain antifungal preparations or in the form of combinations of antifungal compounds with antibacterial compounds. Excludes topical corticosteroid combinations (see D7B) and topical scalp antifungals which are in D1A3.	
D1A2	Systemic dermatological antifungals	R1999
	Includes only griseofulvin-type products which are used for the treatment of dermatological conditions. All other systemic forms of antifungals which are used for dermatological purposes are classified in J2A.	
D1A3	Topical scalp antifungals	I1998
	Includes shampoos, lotions, creams, gels etc containing antifungal substances eg ketoconazole.	

D2	EMOLLIENTS, PROTECTIVES	
D2A	EMOLLIENTS, PROTECTIVES	r2016
	Includes skincare products and emollients (with or without active therapeutic agents), protectives, suntan irradiation preparations, etc. Products containing afamelanotide for erythropoietic protoporphyria (EPP) are classified here.  This class also includes drying powders for hyperhydrosis and wound coverings containing emollients. Other wound coverings are classified according to any ingredients they contain eg D3A, D6A, D8A.	

D3	WOUND HEALING AGENTS	
D3A	WOUND HEALING AGENTS	R2002
D3A1	Skin/dermal/epidermal/equivalents	R2006
	Includes bioengineered and living human skin equivalents, and also skin growth factors	
D3A9	All other wound healing agents	r2010
	Includes topical preparations for open wounds, ulcers, etc. Wound healing topical vitamins and topical anabolic steroids should be included in this group when they cannot be classified satisfactorily elsewhere. Combinations of enzymes with anti-infectives used for wound healing are classified here. This group also includes skin regeneratives and stimulants, topical extracts, eg of camomile, unspecified suspensions and topical preparations for prophylaxis and therapy of mastitis. Topical oestrogens when used for gynaecological purposes are classified in G2F. Topical haemostyptics including those for dental use are classified here. Antibiotic-containing collagen implants (eg sponges) are classified here.	

D4	ANTI-PRURITICS, INCLUDING TOPICAL ANTIHISTAMINES, ANAESTHETICS, ETC	
D4A	ANTI-PRURITICS, INCLUDING TOPICAL ANTIHISTAMINES, ANAESTHETICS, ETC	r2012
	Included in this group are topical preparations for the relief of itching, insect bites, etc which may contain antihistamines, anaesthetics, etc but excluding corticosteroid combinations (see D7B). Systemic anti-pruritics are classified in R6A if they contain antihistamines. Oral nalfurafine is classified here.  Local anaesthetics for use in surgical or medical procedures are in N1B.	

## **D5** NONSTEROIDAL PRODUCTS FOR INFLAMMATORY SKIN r2019 **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). Sulphur baths which contain other substances besides sulphur and are not used for dermatological purposes, are classified in M2A. D<sub>5</sub>A TOPICAL ANTIPSORIASIS PRODUCTS r2019 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 r2022 Includes products for the treatment of psoriasis. These products may also be for other inflammatory skin conditions. Products containing brodalumab, ixekizumab, 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. **Products** containing apremilast for multiple conditions are classified in L4X. OTHER NONSTEROIDAL PRODUCTS FOR INFLAMMATORY SKIN D5X r2019 **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.

<b>D6</b>	TOPICAL ANTIBACTERIALS AND ANTIVIRALS	r2009
D6A	TOPICAL ANTIBACTERIALS	r2009
	Includes all topical antibacterials and antibacterial combinations except those classified in D1A1, D1A3, D3A, D7B1, or D10A.  Topical antibacterials when in combination with wound healing agents, are classified in D3A9.  Antiseptics and disinfectants are classified in D8A.	
D6B	Out of use; can be reused.	
D6C	Out of use; can be reused.	
D6D	TOPICAL VIRAL INFECTION PRODUCTS	r2008
	For systemic treatment of viral conditions, see J5.	
D6D1	Topical antivirals	I1998
	Includes topical forms of antivirals eg acyclovir, idoxuridine and podophyllotoxin.	
D6D9	Other topical products used in viral infections	r2016
	Includes products, eg those containing carbenoxolone, used for the symptomatic treatment of viral infections such as herpes simplex. Other products not containing podophyllotoxin used to treat external condylomata acuminata (genital warts) are classified here, eg fluorouracil injectable gel.	
	Products containing topical imiquimod for actinic keratosis, genital warts and basal cell carcinoma are classified here.	

<b>D7</b>	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	r2019
	Includes all dermatological products containing corticosteroids in combination with one or more active ingredients, except those classified in D5A or D10A. 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 be classified in D7B4.	
D7B1	Combinations of corticosteroids with antibacterials	r2019
	If, in addition to corticosteroid and antibacterial or bacteriostatic (including antiseptic) agents (eg 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	r2019
	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 for psoriasis are classified in D5A; these products may also be for other inflammatory skin conditions as well as psoriasis.	

D8	ANTISEPTICS AND DISINFECTANTS	
D8A	ANTISEPTICS AND DISINFECTANTS	r2009
	This group includes all dermatological antiseptic preparations for human use not classified in any of the following:	
	D3A - Wound healing agents D6A - Topical antibacterials D6D - Topical viral infection products D7B - Combinations of corticosteroids with antibacterials D10A - Anti-acne preparations P3 - Ectoparasiticides	
	This class also includes soaps and shampoos with antiseptic and/or disinfectant properties.	
	Antiseptics for non-human use are classified in V5A	
	Products used for both human and non-human use are classified here.	
	In the German hospital market only, the D8A class is split to the fourth level.	
D8A1	Antiseptics and disinfectants, excluding hand products	12000
D8A2	Hand antiseptics and disinfectants	12000

<b>D9</b>	Out of use; can be reused. Discontinued in 1991, and products classified according	
	to their indication.	

D10	ANTI-ACNE PREPARATIONS	
D10A	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.	
D10B	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.	

D11	OTHER DERMATOLOGICAL PREPARATIONS	
D11A	OTHER DERMATOLOGICAL PREPARATIONS	r2019
	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.	

G	GENITO-URINARY SYSTEM AND SEX HORMONES	
G1	GYNAECOLOGICAL ANTI-INFECTIVES	
	The need for a systematic approach to classifying combination products (ie those containing two or more different gynaecological anti-infectives) has led to the adoption of a hierarchical system with a G1A (trichomonacide) ingredient taking precedence over a G1B (antifungal), G1B over G1C, etc.	
G1A	TRICHOMONACIDES	r2020
	Includes metronidazole, nifuratel, nimorazole, ornidazole, secnidazole, tinidazole. Products for both trichomoniasis and amoebiasis are classified here.	
G1A1	Systemic trichomonacides	R2004
	Includes all oral solid, suspension and oral liquid forms of metronidazole and other trichomonacides.	
G1A2	Topical trichomonacides	
	Includes vaginal tablets and vaginal suppositories of metronidazole and other trichomonacides. Rectal suppositories to be classified in J8.	
G1A3	Combined forms of trichomonacides	
	Includes those packs of metronidazole and other trichomonacides which contain both systemic and topical forms for the treatment of gynaecological conditions eg Flagyl Compak.	
G1B	GYNAECOLOGICAL ANTIFUNGALS	R1999
	Includes antifungal products indicated only for gynaecological conditions. These can be specific gynaecological forms, eg ovules, or systemic forms. Excluded are antifungals for dermatological use which are classified in D1A or J2A and antifungals for systemic infections which are classified in J2A. If a product is indicated for both systemic and gynaecological infections, then it is classified in J2A.	
G1C	GYNAECOLOGICAL ANTIBACTERIALS	r2009
	Includes those products indicated for gynaecological conditions. Excluded are antibacterials for dermatological use which are classified in D6A, and general systemic antibacterials which are classified in J1 and J3.	

G1D	GYNAECOLOGICAL ANTISEPTICS	r2021
	Includes those products indicated for gynaecological conditions. Excluded are antiseptics for dermatological use which are classified in D8A and antiseptics for non-human use, which are classified in V5A.	
	Products containing dapivirine (vaginal ring) for the prevention of HIV transmission are classified here.	

G2	OTHER GYNAECOLOGICALS	
G2A	UTEROTONIC PRODUCTS	r2019
	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	r2021
	This group includes all topical hormones and/or steroids indicated for gynaecological conditions. Transdermal patches and vaginal formulations containing oestrogens and intended for a systemic effect are classified in G3C.	
	Products containing progesterone in topical form (such as gel) for relief of breast pain are classified here.	
G2X	OTHER GYNAECOLOGICAL PRODUCTS	I1997
G2X1	Gynaecological antispasmodics	I1997
	This group includes oral analgesics and antispasmodics indicated exclusively for dysmenorrhoea.	

# G2X9 Other gynaecologicals r2021

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 bremelanotide or flibanserin and indicated for hypoactive sexual desire disorder (HSDD) in women are classified here.

Products containing omega-3 fatty acids for use as supplements during pregnancy and when breastfeeding are classified in V3X.

G3	SEX HORMONES AND PRODUCTS WITH SIMILAR DESIRED EFFECTS, SYSTEMIC ACTION ONLY	
	Sex hormones used as cytostatics must be classified in L2.	
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
G3C	OESTROGENS, EXCLUDING G3A, G3E, G3F	r2019
	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	r2021
	Products containing progesterone in topical form (such as gel) for the relief of breast pain are classified in G2F.	
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

r2022

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.

Products containing relugolix or elagolix in combination with oestrogens and progestogens for uterine fibroids are classified here. Products containing relugolix or elagolix (single ingredient) for uterine fibroids or endometriosis are classified in H1C3. Products containing relugolix for cancer are classified in L2B9.

G4	UROLOGICALS	
G4A	URINARY ANTI-INFECTIVES AND ANTISEPTICS	
G4A1	Urinary antibacterials	r2009
	This group includes those products containing an antibacterial where the only indication is for urinary tract infections. Sulphonamides are generally classified in J3 and other antibacterials in J1. All trimethoprim formulations are classified in J1E. Combinations with halogenated or non-halogenated quinolones are classified in G4A2.	
G4A2	Urinary non-halogenated quinolones	R2009
	Includes products containing non-halogenated quinolones which are only indicated for urinary tract infections. Systemic products containing halogenated quinolones (plain) are classified in J1G. Combinations of halogenated or non-halogenated quinolones with other substances (including antibacterials) and indicated for urinary tract infections are classified in G4A2.	
G4A3	Out of use; can be reused from 2010.	D2007
G4A9	Other urinary antiseptics	I2007
	Includes such products as nitrofurantoin and methenamine. Irrigating solutions are classified in Group K.	
G4B	Out of use; can be reused from 2010.	D2007
G4C	BPH (BENIGN PROSTATIC HYPERTROPHY) PRODUCTS	R2007
G4C1	Out of use	D2012
G4C2	BPH alpha-adrenergic antagonists, plain	r2015
	Includes products containing alpha-adrenergic antagonists, such as alfuzosin, tamsulosin. Products containing terazosin, for BPH or hypertension, are classified here. Products containing doxazosin are classified in C2A2. Products containing indoramin, for BPH or hypertension, are classified in C2A2, or in N2C9 if indicated for migraine.	
G4C3	BPH 5-alpha testosterone reductase inhibitors (5-ARI), plain	r2018
	Includes products containing 5-alpha testosterone reductase inhibitors (5-ARI), such as dutasteride and finasteride.	
	Products containing finasteride 5mg and for BPH are classified here. Products containing finasteride 1mg and for alopecia are classified in D11A.	

BPH alpha-antagonists and 5-ARIs, combinations	I2012
Includes products containing an alpha-adrenergic antagonist and a 5-alpha testosterone reductase inhibitor. If one or more additional substances are included, then the product is classified in G4C7.	
BPH 5-ARIs and/or alpha-antagonists in combination with other substances	r2020
Includes products containing eg tamsulosin with tolterodine, tamsulosin with a substance of natural origin, or tamsulosin with corticosteroids.	
Out of use	D2012
BPH products, other	r2021
Includes products of herbal or animal origin, as well as homeopathic products, for BPH. Products containing mepartricine, <i>Serenoa repens</i> , or <i>Pygeum africanum</i> are classified in G4C9 if indicated for BPH. This class also includes herbal products for improving prostatic health.	
Products containing PDE5 inhibitors for BPH only are classified here.	
URINARY INCONTINENCE PRODUCTS	I2007
Urinary incontinence products	I2007
This group includes preparations for urinary incontinence eg those containing duloxetine, flavoxate, oxybutynin, tolterodine. Products of natural origin and homeopathic products are classified in G4D8.	
Urinary incontinence products of natural origin	I2007
Includes products of herbal or animal origin, as well as homeopathic products, for urinary incontinence. Also includes collagen injections for incontinence.	
	Includes products containing an alpha-adrenergic antagonist and a 5-alpha testosterone reductase inhibitor. If one or more additional substances are included, then the product is classified in G4C7.  BPH 5-ARIs and/or alpha-antagonists in combination with other substances Includes products containing eg tamsulosin with tolterodine, tamsulosin with a substance of natural origin, or tamsulosin with corticosteroids.  Out of use BPH products, other Includes products of herbal or animal origin, as well as homeopathic products, for BPH. Products containing mepartricine, Serenoa repens, or Pygeum africanum are classified in G4C9 if indicated for BPH. This class also includes herbal products for improving prostatic health.  Products containing PDE5 inhibitors for BPH only are classified here.  URINARY INCONTINENCE PRODUCTS  Urinary incontinence products  This group includes preparations for urinary incontinence eg those containing duloxetine, flavoxate, oxybutynin, tolterodine. Products of natural origin and homeopathic products are classified in G4D8.  Urinary incontinence products of natural origin Includes products of herbal or animal origin, as well as homeopathic products, for

G4E	ERECTILE DYSFUNCTION PRODUCTS	r2015
	Includes products for the treatment of male impotence.	
G4E1	Erectile dysfunction products, PDE5 inhibitors	r2021
	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.	
	Products containing PDE5 inhibitors for BPH only are classified in G4C9.	
G4E9	Erectile dysfunction products, others	r2021
	Includes products containing eg alprostadil, apomorphine, etc when indicated for the treatment of erectile dysfunction. Products containing alprostadil for peripheral arterial occlusive disease only are classified in C4A1. Products containing alprostadil for erectile dysfunction only are classified here. Products containing alprostadil for patent ductus arteriosus only or for multiple indications are classified in C1X.	
	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.	

Н	SYSTEMIC HORMONAL PREPARATIONS (EXCLUDING SEX HORMONES)	
H1	PITUITARY AND HYPOTHALAMIC HORMONES	R1995
H1A	ACTH	
	ACTH and synthetic analogues.	
H1B	Out of use; can be reused.	
H1C	HYPOTHALAMIC HORMONES	R2003
H1C1	Gonadotrophin-releasing hormones	r2020
	Includes eg buserelin, deslorelin, gonadorelin, goserelin, nafarelin, leuprorelin, triptorelin, when not used as cytostatics. When these substances are used as cytostatics, they are classified in L2A3. Products containing gonadotrophin-releasing hormone analogues for cancer and also for other conditions, are classified in L2A3.	
H1C2	Antigrowth hormones	r2020
	Products for acromegaly are classified here. Lanreotide, octreotide and somatostatin are classified here. Somatostatin, when used as a haemostyptic, is classified in B2G. Growth hormone antagonists, such as pegvisomant, are classified here.	
H1C3	Antigonadotrophin-releasing hormones	r2022
	Cetrorelix and ganirelix are classified here. Products containing relugolix or elagolix (single ingredient) for uterine fibroids or endometriosis are classified here. Products containing relugolix or elagolix in combination with oestrogens and progestogens for uterine fibroids are classified in G3X. Products containing relugolix for cancer are classified in L2B9.	

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	r2020
	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.	
	G4C7 – Corticosteroids with alpha-adrenergic antagonists.	
	M1B - Corticosteroids with anti-inflammatory agents, analgesics, muscle relaxants, etc.	
	R1B – Systemic nasal preparations	
	R3D, R3F, R3L3 - Anti-asthmatic inhalants acting topically on the bronchioles.	

Н3	THYROID THERAPY	
нза	THYROID PREPARATIONS	
	Includes all natural thyroid extracts and synthetic analogues for the treatment of hypothyroidism.	
нзв	ANTI-THYROID PREPARATIONS	
	Products for treatment of hyperthyroidism and similar disorders.	
нзс	IODINE THERAPY	
	Includes all systemic iodine preparations with multiple indications. This group does not include dermatologicals or drug combinations with specific indications (eg rheumatism).	

H4	OTHER HORMONES	
H4A	CALCITONINS	
	This group includes all calcitonin products (pork, salmon, eel and synthetic).	
H4B	GLUCAGON	
H4C	GROWTH HORMONES	r2022
	Includes products for growth conditions and also for AIDS wasting conditions. Products containing anamorelin for cachexia are classified here. Products containing lonapegsomatropin are classified here.	
H4D	ANTIDIURETIC HORMONES	
	This group includes argipressin, desmopressin, lypressin, ornipressin, vasopressin.	
H4E	PARATHYROID HORMONES AND ANALOGUES	I2008
	Includes parathyroid hormone analogues, teriparatide.	
H4F	ANTIPARATHYROID PRODUCTS	r2014
	Includes products containing eg cinacalcet, doxercalciferol, falecalcitriol, maxacalcitol, paricalcitol, when they are indicated for secondary hyperparathyroidism. Products containing vitamin D or its analogues with multiple indications are classified in A11C2.	
H4V	Out of use; can be reused from 2011.	D2008
H4X	OTHER HORMONES AND PREPARATIONS WITH SIMILAR ACTIONS	r2009
	Products containing melatonin only and indicated for sleep rhythm disturbances are classified here. Prolonged-release melatonin indicated for primary insomnia is classified in N5B1. Products for insomnia that contain a sedative/hypnotic plus melatonin are classified in N5B in the appropriate subclass (N5B2, N5B4 or N5B5).	

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	

J1D	CEPHALOSPORINS	R1997
	Includes all systemic cephalosporins, plain or in combination with other anti- infectives, except in combination with tetracyclines (J1A), chloramphenicols (J1B), broad spectrum penicillins (J1C), products in J1K-P, J1X and sulphonamides (J3A). Combinations with phosphonomycin should, however, be included in this class.	
J1D1	Oral cephalosporins	
	Also included are suppository presentations.	
J1D2	Injectable cephalosporins	
J1E	TRIMETHOPRIM AND SIMILAR FORMULATIONS	R1997
	Includes all systemic trimethoprim formulations, eg Bactrim/Septrin, except in combination with tetracyclines (J1A), chloramphenicols (J1B), broad spectrum penicillins (J1C), cephalosporins (J1D) and products in J1K-P, J1X.	
J1F	MACROLIDES AND SIMILAR TYPES	R2003
	Includes all systemic macrolides, including erythromycin, spiramycin, oleandomycin, triacetyloleandomycin, kitasamycin, lincomycin and clindamycin, plain or in combination with other anti-infectives, except in combination with tetracyclines (J1A), chloramphenicols (J1B), broad spectrum penicillins (J1C), cephalosporins (J1D), trimethoprim combinations (J1E), products in J1K-P, J1X and sulphonamides (J3A). Also includes streptogramins.	
J1G	FLUOROQUINOLONES	R2009
	This group includes norfloxacin and similar quinolone antibacterials such as fleroxacin, gatifloxacin, grepafloxacin, ofloxacin, pefloxacin and sparfloxacin. Rosoxacin is also included. Excluded are combinations with tetracyclines (J1A), chloramphenicols (J1B), broad spectrum penicillins (J1C), cephalosporins (J1D), trimethoprim formulations (J1E), macrolides (J1F), aminoglycosides (J1K), carbenicillin and similar (J1L), rifampicin/rifamycin (J1M), other beta-lactam antibacterials (J1P), and the miscellaneous antibacterials of J1X. Includes all systemic products containing halogenated quinolones even if only indicated for urinary tract infections. Combinations of halogenated quinolones with other substances and indicated for urinary tract infections are classified in G4A2.	
J1G1	Oral fluoroquinolones	r2018
	Also included are suppository presentations.	
J1G2	Injectable fluoroquinolones	I1997

J1G9	Other fluoroquinolones	I2018
	Includes inhaled forms of levofloxacin. Suppository forms of fluoroquinolones are classified in J1G1.	
J1H	MEDIUM AND NARROW SPECTRUM PENICILLINS	
J1H1	Plain medium and narrow spectrum penicillins	R1997
	Includes all penicillins (natural and semi-synthetic) except broad spectrum penicillins in J1C, carbenicillin, carindacillin and similar in J1L, or combinations in J1A-J1F, J1K-P, J1X and J3A. Azidocillin is included in this group.	
J1H2	Penicillin/streptomycin combinations	
J1J	Out of use; can be reused.	
J1K	AMINOGLYCOSIDES	R2006
	Includes all systemic aminoglycosides, plain or in combination with other anti- infectives, except in combination with sulphonamides (J3A). Includes bone cements containing aminoglycosides.	
J1L	CARBENICILLIN AND SIMILAR TYPES	R2007
	Includes carbenicillin, carindacillin and similar types, plain or in combination with other anti-infectives, except in combination with aminoglycosides (J1K) and sulphonamides (J3A).	
J1M	RIFAMPICIN/RIFAMYCIN	
	Includes all rifampicins/rifamycins except where used primarily as tuberculostatics (J4A) and except when combined with products in J1K, J1L and J3A.	
J1N	Out of use; can be re-used from 1997	D1994
J1P	OTHER BETA-LACTAM ANTIBACTERIALS, EXCLUDING PENICILLINS, CEPHALOSPORINS	I1997
J1P1	Monobactams	I1997
	Includes aztreonam.	
J1P2	Penems and carbapenems	r2008
	Includes imipenem and combinations of imipenem with cilastatin. Also includes ertapenem, meropenem.	

J1P3	Carbacephems	I1997
	Includes loracarbef.	
J1P9	All other beta-lactam antibacterials	I1997
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	r2020
	Includes all systemic antibacterials which do not fit into J1A-J1X2, eg daptomycin, fosfomycin, fusidic acid, linezolid, novobiocin, plain sulbactam, pristinamycin, spectinomycin, and tigecycline. Formulations of fosfomycin with broad spectrum penicillins are in J1C and formulations with cephalosporins are in J1D.	

## J2 SYSTEMIC AGENTS FOR FUNGAL INFECTIONS

## J2A SYSTEMIC AGENTS FOR FUNGAL INFECTIONS

R2007

Includes all systemic forms of antifungal products which are used for systemic and/or dermatological conditions. However griseofulvin-type products are classified in D1A2.

All gynaecological forms, eg vaginal tablets, of antifungal products are in G1B. Oral systemic forms of products, eg oral tablets, which are exclusively indicated for gynaecological use are in G1B. If a product in its oral systemic form is indicated for both gynaecological and systemic fungal infections then it is classified in J2A.

Topical oral forms of products, eg oral gels, which are exclusively indicated for fungal infections of the mouth are in A1B.

## J3 SYSTEMIC SULPHONAMIDES

## J3A SYSTEMIC SULPHONAMIDES

r2009

This group includes plain sulphonamides and sulphonamide/antibacterial combinations but excludes trimethoprim/sulphonamides which are classified in J1E.

Sulphonamides indicated primarily as antidiarrhoeals are classified in A7A and those indicated for the treatment of urinary tract infections only are classified in G4A1. In combination products, including other antibacterials, the importance, weight or amount of sulphonamide is unimportant as products containing, say tetracycline, chloramphenicol, oleandomycin and a sulphonamide would be classified in J3A as would a penicillin and three sulphonamides.

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	12000
J4A2	Antituberculars, kits, four or more ingredients	12000
J4A3	Antituberculars, kits, three ingredients	12000
J4A4	Antituberculars, kits, two ingredients	12000
J4A5	Antituberculars, fixed dose, four or more ingredients	12000
J4A6	Antituberculars, fixed dose, three ingredients	12000
J4A7	Antituberculars, fixed dose, two ingredients	12000
J4A9	Antituberculars, others	12000
J4B	DRUGS FOR THE TREATMENT OF LEPRA	r2022
	Includes preparations used for the treatment of lepra (eg aldesulphone, clofazimine, dapsone). Products containing thalidomide for cancer are classified in L1K and for erythema nodosum leprosum (ENL) in L4X. Products for both cancer and ENL are classified in L1K.	

J5	ANTIVIRALS FOR SYSTEMIC USE	R2018
J5A	Out of use	D1998
J5B	ANTIVIRALS, OTHER	r2022
	Includes systemic antivirals for herpes, influenza, coronavirus, other viral respiratory conditions, etc. Excludes topical skin antivirals (D6D), topical ophthalmic antivirals (S1D), HIV antivirals (J5C), and hepatitis antivirals (J5D).	
J5B1	Out of use	D2018
J5B2	Out of use	
J5B3	Herpes antivirals	I2008
	Products used against herpes virus infections, including specific systemic forms of products for cytomegalovirus infections (including CMV retinitis), are classified here. Products in topical ophthalmic forms for CMV retinitis are classified in S1D.	
J5B4	Influenza antivirals	r2022
	Includes products indicated specifically for influenza. Products containing favipiravir for influenza only are classified here. Products containing favipiravir for COVID-19 only are classified in J5B6. Products containing favipiravir for both influenza and COVID-19 are classified in J5B6.	
J5B5	Respiratory antivirals, other	R2022
	Includes products indicated specifically for treatment of respiratory syncytial virus (RSV) infections. Products containing palivizumab for the prevention of RSV infections are classified in J6H9.	
	Also includes inhalation forms of ribavirin where no indication has been specified.	

J5B6	Coronavirus antivirals	12022
	Includes products containing bamlanivimab, casirivimab, etesevimab, favipiravir, imdevimab, molnupiravir, sotrovimab, regdanvimab, remdesivir, etc, for treatment of COVID-19.	
	Products containing favipiravir for influenza only are classified in J5B4 (influenza antivirals). Products containing favipiravir for both influenza and COVID-19 are classified here.	
	Products containing baricitinib, levilimab, tocilizumab, etc (immunosuppressants that have been used in COVID-19) are classified in L4. Dexamethasone (has been used in COVID-19) is also classified elsewhere in the appropriate hormone class.	
	Vaccines for coronavirus are classified in J7E6.	
J5B9	Antivirals, others	I2008
	Includes products containing lysozyme for viral infections.	

J5C	HIV ANTIVIRALS	r2021
	Includes antiviral products specifically used to treat HIV (human immunodeficiency virus).	
	Combinations of different classes of HIV antivirals are classified in J5C9. Combinations of HIV antivirals from a single class are classified in that relevant specific class, eg a product containing only two nucleoside reverse transcriptase inhibitors is classified in J5C1.	
	Pentamidine isethionate which is used to treat <i>Pneumocystis carinii</i> in AIDS is classified in P1G.	
	Products containing dapivirine (vaginal ring) for the prevention of HIV transmission are classified in G1D.	
J5C1	Nucleoside and nucleotide reverse transcriptase inhibitors	r2018
	Includes abacavir, didanosine, emtricitabine, lamivudine, stavudine, tenofovir disoproxil, zalcitabine, zidovudine. Single-ingredient products containing tenofovir disoproxil and indicated for either HIV and/or hepatitis are classified here.	
	Products containing single-ingredient lamivudine or tenofovir alafenamide and for hepatitis B only are classified in J5D2.	
J5C2	Protease inhibitors	r2011
	Includes amprenavir, atazanavir, darunavir, fosamprenavir, indinavir, lopinavir, nelfinavir, ritonavir, saquinavir, tipranavir.	
J5C3	Non-nucleoside reverse transcriptase inhibitors	r2011
	Includes delavirdine, efavirenz, etravirine, nevirapine.	
J5C4	HIV antivirals, entry inhibitors	I2011
	Includes products containing entry inhibitors such as enfuvirtide, maraviroc.	
J5C5	HIV antivirals, integrase inhibitors	I2015
	Includes products containing integrase inhibitors eg dolutegravir, elvitegravir, raltegravir.	

J5C9	HIV antivirals, other	r2018
	Includes combinations of different classes of HIV antivirals. Combinations of HIV antivirals from a single class are classified in that relevant specific class, eg a product containing only nucleoside reverse transcriptase inhibitors is classified in J5C1.	
	Products containing cobicistat as a single ingredient are classified here. Products containing cobicistat in combination with HIV antivirals are classified in the appropriate class for the antivirals.	

J5D	HEPATITIS ANTIVIRALS	I2018
J5D1	Hepatitis antivirals, interferon and ribavirin	I2018
	Products for hepatitis only containing interferons and/or ribavirin. The products can be for hepatitis B and/or hepatitis C.	
	Products containing interferons and/or ribavirin in combination with a substance from J5D2 are classified in J5D2. Products containing interferons and/or ribavirin in combination with a substance from J5D3 are classified in J5D3. Products containing interferons (with or without ribavirin) that are for multiple indications are classified in L3B.	
J5D2	Hepatitis B antivirals	I2018
	Includes products containing adefovir dipivoxil, clevudine, entecavir, telbivudine, etc.	
	Products containing lamivudine or tenofovir alafenamide for hepatitis B are classified here; products containing lamivudine or tenofovir alafenamide for HIV are classified in J5C1 or J5C9.	
	Combinations of these substances with interferons and/or ribavirin are classified here. Products containing interferons and/or ribavirin for hepatitis B are classified in J5D1.	
	Products containing tenofovir disoproxil only, and indicated for hepatitis, HIV, or for both conditions, are classified in J5C1.	
J5D3	Hepatitis C antivirals	I2018
	Includes products containing asunaprevir, beclabuvir, boceprevir, daclatasvir, dasabuvir, elbasvir, glecaprevir, grazoprevir, ledipasvir, narlaprevir, ombitasvir, paritaprevir, pibrentasvir, simeprevir, sofosbuvir, telaprevir, vaniprevir, velpatasvir, voxilaprevir, etc.	
	Combinations of these substances with each other are also classified here. Combinations of these substances with ritonavir are classified here. Combinations of these substances with interferons and/or ribavirin are classified here. Products containing interferons and/or ribavirin for hepatitis C are classified in J5D1.	
J5D9	Hepatitis antivirals, other	I2018
	Includes other products for viral hepatitis.	

<b>J</b> 6	SERA AND GAMMA-GLOBULIN	
J6A	ANTITOXIC SERA	
	Includes heterologous sera derived from animals such as the horse and the sheep.	
J6A1	Snake-bite sera	
J6A2	Botulism sera	
J6A3	Gas gangrene sera	
J6A4	Tetanus sera	
J6A5	Diphtheria sera	
J6A6	Rabies sera	
J6A9	Other antitoxic sera	
J6B	Out of use; can be reused from 1998.	D1995
J6B1	Out of use; can be reused from 1998.	D1995
J6B9	Out of use; can be reused from 1998.	D1995
J6C	POLYVALENT IMMUNO-GLOBULINS - INTRAVENOUS	
	The action of these homologous substances is mainly based on the IgG fraction.	
J6D	HOMOLOGOUS IMMUNOLOGICALLY ACTIVE GLOBULINS – INTRAVENOUS	
	The action of these homologous substances is not (or not solely) based on the action of the IgG fraction.	
J6D1	Humoral globulins	
	Substances principally associated with the humoral immune response.	
J6D2	Cellular globulins	
	Substances principally associated with the cellular immune response.	

J6E	POLYVALENT IMMUNO-GLOBULINS - INTRAMUSCULAR	R2006
	The action of these homologous substances is based on a wide spectrum of antibodies mainly belonging to the IgG fraction. Includes subcutaneous as well as intramuscular forms.	
J6F	POLYVALENT IMMUNOGLOBULINS - COMBINATION MODULATION - MAINLY INTRAMUSCULAR	
	These homologous immunoglobulins include: - those whose action is not exclusively based on the IgG fraction those which exist in combination with other substances those which cause a modulation of the immune response.	
J6G	SPECIFIC IMMUNOGLOBULINS - ANTIBACTERIAL	r2022
	These homologous substances (given intramuscularly or intravenously) have a certain antibody titre against a certain specified antigen. Products for post-exposure prophylaxis are classified here. Products for both post-exposure prophylaxis and for treatment are classified here.	
J6G1	Tetanus immunoglobulin	
J6G2	Pertussis immunoglobulin	
J6G9	Other antibacterial immunoglobulins	
	This group includes diphtheria, streptococci, staphylococci and pseudomonas immunoglobulins.	
Ј6Н	SPECIFIC IMMUNOGLOBULINS - ANTIVIRAL	r2022
	These homologous substances (given intramuscularly or intravenously) have a certain antibody titre against a certain specified antigen. Products for post-exposure prophylaxis are classified here. Products for both post-exposure prophylaxis and for treatment are classified here. Monoclonal antibodies for treatment of COVID-19 are classified in J5B6.	
J6H1	Mumps immunoglobulin	
Ј6Н2	Measles immunoglobulin	
Ј6Н3	Rubella immunoglobulin	
Ј6Н4	Hepatitis immunoglobulin	
J6H5	Rabies immunoglobulin	

J6H9	Other antiviral immunoglobulins	r2022
	This group includes varicella-zoster, tick-borne meningo-encephalitis, poliomyelitis, cytomegaly and herpes immunoglobulins. Products containing palivizumab for the prevention of RSV infections are classified here.	

J6J	OTHER SPECIFIC IMMUNOGLOBULINS	r2014
	These homologous substances (given intramuscularly or intravenously) have a certain antibody titre against a certain specified antigen which is not of bacterial or viral origin.	
	Products containing anti-D (Rho) immunoglobulin are classified here.	

J7	VACCINES	
J7A	Out of use	D2014
J7B	COMBINATIONS OF VACCINES	r2018
	Included are combinations of vaccines for protection against more than one virus and/or bacteria and/or protozoa.	
J7B1	Combinations with a tetanus component	
J7B2	Combinations with measles and/or mumps	R2007
	MMR vaccine is classified here.	
J7B3	All other combinations	
J7C	Out of use	D2014
J7D	BACTERIAL VACCINES	r2018
	Includes separate classes for vaccines against only one bacterial group. For vaccines against a combination of bacteria or viruses, see J7B.	
J7D1	Pneumococcal vaccines	I2014
J7D2	Meningococcal vaccines	I2014
J7D3	Haemophilus B vaccines	I2014
J7D4	Typhoid vaccines	I2014
	Includes vaccines against typhoid and paratyphoid. Vaccines against typhus are classified in J7D9.	
J7D5	Tetanus vaccines	I2014
J7D6	Tuberculosis vaccines	r2020
	Products containing BCG vaccine for cancer are classified in L1X9; those for general immunostimulation are classified in L3A9.	
J7D7	Cholera vaccines	I2014
J7D9	All other bacterial vaccines	I2014
	Includes all other vaccines against one bacterial group, eg diphtheria, pertussis, typhus.	

<b>J7</b> E	VIRAL VACCINES	r2018
	Includes separate classes for vaccines against only one viral group. For vaccines against a combination of bacteria or viruses, see J7B.	
J7E1	Influenza vaccines	I2014
J7E2	Varicella vaccines	I2014
J7E3	HPV (human papillomavirus) vaccines	I2014
J7E4	Hepatitis vaccines	I2014
J7E5	Rotavirus vaccines	I2014
J7E6	Coronavirus vaccines	I2021
	Includes vaccines against COVID-19.	
J7E9	All other viral vaccines	I2014
	Includes all other vaccines against one viral group, eg Japanese encephalitis, measles, mumps, polio, rubella, rabies, tick-borne encephalitis, yellow fever.	
J7F	PROTOZOAL VACCINES	I2018
	Includes separate classes for vaccines against only one protozoal group. For vaccines against a combination of a protozoal group and/or other organisms, see J7B.	
J7F1	Malaria vaccines	I2018
J7F9	All other protozoal vaccines	I2018
J7X	ALL OTHER VACCINE-LIKE PRODUCTS	r2018
	Includes products containing infectious agents and/or their derivatives, eg lysates and extracts of bacteria, that are not strictly considered vaccines.	

J8	OTHER ANTI-INFECTIVES	R1993
J8A J8B	Out of use; can be reused.  ANAEROBICIDES	R2006
ЗОВ	ANAERODICIDES	K2000
	Includes infusions, ampoules and rectal suppositories of metronidazole and other anaerobicides. Topical forms can be classified here. Oral forms of these compounds to be classified in G1A1 and vaginal tablets/suppositories in G1A2. Products for both trichomoniasis and amoebiasis are classified in G1A1.	
J8X	ALL OTHER ANTI-INFECTIVES	I1993
	Includes other anti-infectives not classified in J1-J7. Anaerobicides such as metronidazole to be classified in J8B.	

K	HOSPITAL SOLUTIONS	
	This class includes all intravenous solutions, injection solutions/infusion additives, irrigating solutions, dialysis solutions and perfusion solutions.	
K1	INTRAVENOUS SOLUTIONS	
	This group includes all intravenous solutions, infusion bottles >=100 ml.	
K1A	ELECTROLYTE SOLUTIONS (>=100 ml)	R2004
	Electrolyte solutions in all concentrations up to and including 10% carbohydrates (<=10%). Includes also arginine, malic acid and darrow (potassium substitution therapy).	
	Exceptions:	
	<ol> <li>Sodium chloride solutions and aqua/aqua bidest are classified in K1B.</li> <li>Combinations with fat emulsions are classified in K1D2.</li> <li>Combinations with amino-acids are classified in K1E.</li> <li>Combinations with osmotic solutions are classified in K1F.</li> </ol>	
K1A1	1/1 – Electrolyte solutions	
	Na+ >120 mmol/l	
K1A2	2/3 – Electrolyte solutions	
	Na+ 91-120 mmol/l	
K1A3	1/2 – Electrolyte solutions	
	Na+ 61-90 mmol/l	
K1A4	1/3 – Electrolyte solutions	
	Na+ <=60 mmol/l	
K1A5	Adapting electrolyte solutions (including sodium)	
	Includes sodium bicarbonate and forced diuresis (FD) solutions.	
K1A6	Paediatric electrolyte solutions	
	Includes all paediatric solutions but excludes paediatric combinations with aminoacids which are classified in K1E5.	

K1A7	Ringer's and Ringer's lactate solutions	r2011
	Modified Ringer's and Ringer's lactate solution is classified in K1A9.	
K1A9	Other electrolyte solutions	r2011
	Includes Coma Diabeticum (CD) solutions. Includes Hartmann's solution. Modified Ringer's and Ringer's lactate solution is classified here.	
K1B	STANDARD SOLUTIONS	R2006
	Includes sodium chloride solutions in all concentrations, both plain and combined with carbohydrates (up to and including 10% carbohydrates (<=10%)), carbohydrate solutions (<=10%) and water for use with injectables (aqua/aqua bidest >=100 ml). All carbohydrate solutions with more than 10% are classified in K1C.	
K1B1	Sodium chloride solutions	
	Includes pure sodium chloride solutions in all concentrations.	
K1B2	Sodium chloride solutions with carbohydrates	R2006
	Includes sodium chloride solutions in all concentrations combined with carbohydrates (<=10%). Solutions with carbohydrate >10% or carbohydrate combinations with electrolytes other than sodium chloride are classified in K1A (carbohydrates <=10%) and K1C3 (carbohydrates >10%).	
K1B3	Carbohydrate solutions (<=10%)	
	The types of products contained in this sub-group are sugar solutions (<=10%) such as glucose (dextrose, grape sugar) and fructose (laevulose, fruit sugar). Also includes polyalcohols such as xylitol and sorbitol.	
	The products classified in this group are solutions with one carbohydrate (<=10%) and carbohydrate combination solutions (<=10%).	
	Carbohydrate solutions (>10%) are classified in K1C1.	
K1B4	Aqua/Aqua bidest	
	Infusion bottles >=100 ml.	
K1C	CALORIC SOLUTIONS (>10%)	
	Includes carbohydrate solutions (>10%) and carbohydrate combination solutions (>10%).	

K1C1	Solutions with one carbohydrate (>10%)	
	The types of products contained in this sub-group are sugar solutions (>10%) such as glucose (dextrose, grape sugar) and fructose (laevolose, fruit sugar). Also included are polyalcohols such as xylitol and sorbitol.	
	Carbohydrate solutions (<=10%) are classified in K1B3.	
K1C2	Carbohydrate combination solutions (>10%)	
	Includes only combinations of two or more carbohydrates eg fructose, glucose, xylitol (FGX) and invert sugar solutions (>10%).	
	Carbohydrate combination solutions (<=10%) are classified in K1B3.	
K1C3	Carbohydrate electrolyte combination solutions (>10%)	
	The group includes single or combined carbohydrates (>10%) eg glucose, fructose, sorbitol and xylitol with electrolytes.	
	The group excludes carbohydrate solutions (single or combined) with electrolytes (carbohydrates <=10%) which are classified in K1A.	
K1D	FAT EMULSIONS, INCLUDING TOTAL PARENTERAL NUTRITION PRODUCTS	R1997
K1D1	Fat emulsions, plain	I1997
	This group includes plain fat emulsions for parenteral applications eg fractions of soybean oil and safflower oil, or mixtures of different oils.	
K1D2	Fat emulsions, combinations	R2006
	This group includes fat emulsions with other substances such as amino acids, glucose, electrolytes. In particular, products for total parenteral nutrition are classified in this class. Multicomponent solutions for total parenteral nutrition with no fat emulsion content, are classified in K1E.	
K1E	AMINO ACID SOLUTIONS	R2006
	This group contains all amino-acid solutions including combinations, except those including fats.	
K1E1	Amino acid standard solutions Includes solutions containing at least all eight essential amino-acids, and may additionally contain non-essential amino-acids, electrolytes, etc.	R2006

	R2005
Includes multicomponent solutions for total parenteral nutrition containing amino- acids and carbohydrates. Electrolytes may also be included. Multicomponent solutions for total parenteral nutrition which additionally contain fat are classified in K1D2. Includes products which have a volume of 2 litres or more.	
Nephro solutions	
Hepatic solutions	
Paediatric amino-acid solutions	
Other amino acid solutions	R2005
Includes amino-acid solutions not classified in K1E or K1D2.	
SOLUTIONS FOR OSMOTIC THERAPY	
Osmotic therapy	
Includes glycerin solutions, mannitol and mannitol combinations with carbohydrates in all concentrations and sorbitol (>=40%).	
Osmotic/oncology therapy	
Includes solutions (eg dextran) with sorbitol (20%).	
SPECIAL INFUSION SOLUTIONS	R2004
Solutions for liver therapy	
Other infusion solutions	
a s iii	cids and carbohydrates. Electrolytes may also be included. Multicomponent olutions for total parenteral nutrition which additionally contain fat are classified in K1D2. Includes products which have a volume of 2 litres or more.  Nephro solutions  Paediatric amino-acid solutions  Other amino acid solutions  Other amino-acid solutions not classified in K1E or K1D2.  SOLUTIONS FOR OSMOTIC THERAPY  Osmotic therapy  Includes glycerin solutions, mannitol and mannitol combinations with arbohydrates in all concentrations and sorbitol (>=40%).  Osmotic/oncology therapy  Includes solutions (eg dextran) with sorbitol (20%).  SPECIAL INFUSION SOLUTIONS  Solutions for liver therapy

K2	PLASMA EXPANDERS	
	Plasma expanders are colloid substances used as plasma substitutes with qualities which are to a high degree commensurate with those of human plasma. Includes dextrans, starches and gelatin solutions.	
K2A	DEXTRANS	
	Dextrans are high-polymeric glucose compounds which are always a mixture of all molecular weights. Dextrans with a molecular weight under 50.000 are subject to renal elimination whilst dextrans with a molecular weight over 50.000 are subject to enzymatic degradation.	
K2A1	Low dextrans	R2005
	Dextrans < = 50,000 Daltons. The main indication is disturbed micro-circulation. Excludes monovalent dextrans, see K4D.	
K2A2	High dextrans	R2005
	Dextrans > 50,000 Daltons. The main indication is volume substitution.	
K2B	STARCHES	
	Includes Haes solutions.	
K2C	GELATIN SOLUTIONS	
	Includes modified gelatin.	

К3	WHOLE BLOOD AND PLASMA SUBSTITUTE SOLUTIONS	
К3А	WHOLE BLOOD AND PLASMA FRACTIONS	
	This group includes whole blood (eg citrate-whole blood, citrate-fresh-blood etc) as well as fluid blood constituents (fresh fluid plasma, dehydrated plasma) and corpuscular blood constituents (eg erythrocytes etc), provided they are not allocated to other systems.	
	- The albumin fraction is classified in groups K3B and K3C.	
	- The blood constituents acting in the immunological system are classified in group J6.	
	- The blood constituents acting in the coagulation system are classified in group B2.	
КЗВ	PROTEIN SOLUTIONS	
	This group includes all plasma protein solutions and albumin solutions with an albumin concentration >=80%. Subdivision as to total protein concentration is effected on the 4th level.	
K3B1	Protein solutions <5,0%	
K3B2	Protein solutions 5,0%	
K3B3	Protein solutions >5,0%	
К3С	PRESERVED HUMAN SERUM	
	This group includes all plasma protein solutions (albumin concentration <80%) containing gammaglobulins but no coagulation factors.	

K4	INJECTION SOLUTIONS/INFUSION ADDITIVES (<100ML)	
	Includes injection solutions and infusion additives <100ml.	
K4A	ELECTROLYTE SOLUTIONS (<100ml)	
	Includes electrolyte solutions in all concentrations up to and including <=10% carbohydrates (1/1, 2/3, 1/2 and 1/3; adapting and paediatric electrolyte solutions), Ringer's and Ringer's lactate solutions.	
K4A1	Electrolyte solutions (<=20ml)	R1993
K4A2	Electrolyte solutions (>20ml and <100ml)	R1993
K4B	STANDARD SOLUTIONS (<100ml)	
	Includes sodium chloride solutions in all concentrations, sodium chloride solutions with carbohydrates (<=10%) and carbohydrate solutions (<=10%). Also included are polyalcohols such as xylitol and sorbitol.	
K4B1	Standard solutions (<=20ml)	R1993
K4B2	Standard solutions (>20ml and <100ml)	R1993
K4C	CALORIC SOLUTIONS (<100ml)	
	Includes solutions with one carbohydrate (>10%), carbohydrate combination solutions (>10%) and carbohydrate electrolyte combination solutions (>10%). Also includes polyalcohols such as xylitol and sorbitol.	
K4D	OTHER INJECTION SOLUTIONS/INFUSION ADDITIVES (<100ml)	R2005
	Includes aqua/aqua bidest, arginine, arginine/malic acid solutions, monovalent dextrans and buffer solutions. Multivitamin products used for parenteral infusion are classified here.	

K5	IRRIGATING SOLUTIONS	
	Irrigating solutions are not to be given intravenously or to be injected. This group includes all solutions which are specified as irrigating solutions.	
K5A	IRRIGATING SOLUTIONS	R2004
K5A1	Water	
K5A2	Saline	
K5A3	Citrates	
K5A4	Glycine	
K5A9	Other irrigating solutions	R1993

K7	PERFUSION SOLUTIONS	R2006
	Perfusion solutions are not to be given intravenously or to be injected. This group includes all solutions which are used for the storage of donor organs and gravity perfusion. Also included are anticoagulant solutions for blood samples. Also products used to arrest the heart are classified here.	
K7A	PERFUSION SOLUTIONS	

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	r2019
	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	R2019
	Antineoplastic monoclonal antibodies against protein kinases are classified here and not in L1H.	
L1G1	Monoclonal antibody antineoplastics, CD20	r2022
	Includes products containing obinutuzumab, ofatumumab, rituximab with hyaluronidase, etc. Products containing ofatumumab for multiple sclerosis only are classified in N7A.	
L1G2	Monoclonal antibody antineoplastics, VEGF/VEGFR	I2019
	Includes products containing bevacizumab, ramucirumab, etc.	
L1G3	Monoclonal antibody antineoplastics, HER-2	r2021
	Includes products containing margetuximab, pertuzumab, trastuzumab deruxtecan, trastuzumab emtansine, etc.	
L1G4	Monoclonal antibody antineoplastics, EGFR	I2019
	Includes products containing cetuximab, necitumumab, nimotuzumab, panitumumab, etc.	
L1G5	Monoclonal antibody antineoplastics, PD-1/PD-L1	I2019
	Includes products containing atezolizumab, avelumab, cemiplimab, durvalumab, nivolumab, pembrolizumab, tislelizumab, etc.	

L1G9	Monoclonal antibody antineoplastics, other	I2019
	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	R2019
	Antineoplastic monoclonal antibodies against protein kinases are classified in L1G.	
L1H1	Protein kinase inhibitor antineoplastics, BCR-ABL	I2019
	Includes products containing bosutinib, dasatinib, imatinib, nilotinib, ponatinib, radotinib, etc.	
L1H2	Protein kinase inhibitor antineoplastics, EGFR	I2019
	Includes products containing afatinib, dacomitinib, erlotinib, gefitinib, icotinib, olmutinib, osimertinib, varlitinib, etc.	
L1H3	Protein kinase inhibitor antineoplastics, ALK	I2019
	Includes products containing alectinib, brigatinib, ceritinib, crizotinib, lorlatinib, etc.	
L1H4	Protein kinase inhibitor antineoplastics, BRAF/MEK	I2019
	Includes products containing binimetinib, cobimetinib, dabrafenib, encorafenib, selumetinib, trametinib, vemurafenib, etc.	

L1H5	Protein kinase inhibitor antineoplastics, CDK 4/6	I2019
	Includes products containing abemaciclib, palbociclib, ribociclib, etc. Products containing both ribociclib and letrozole are classified here.	
L1H6	Protein kinase inhibitor antineoplastics, BTK	12021
	Includes products containing acalabrutinib, ibrutinib, tirabrutinib, zanubrutinib, etc.	
L1H9	Protein kinase inhibitor antineoplastics, other	r2022
	Includes all other protein kinase inhibitor antineoplastics, for example those inhibiting HER-2, JAK 1-2, Pi3K, etc.	
	Includes axitinib, cabozantinib, erdafitinib, everolimus, idelalisib, lapatinib, lenvatinib, midostaurin, neratinib, nintedanib, pazopanib, regorafenib, rivoceranib (apatinib), ruxolitinib, sorafenib, sunitinib, temsirolimus, tivozanib, vandetanib, etc.	
	Products containing nintedanib for idiopathic pulmonary fibrosis only are classified in R7D. Products containing nintedanib for cancer only are classified here. Products containing nintedanib for both cancer and idiopathic pulmonary fibrosis are classified in R7D.	
L1J	PROTEASOME INHIBITOR ANTINEOPLASTICS	I2018
	Includes products containing proteasome inhibitors for neoplasms, eg bortezomib, carfilzomib, ixazomib, etc.	
L1K	LIDOMIDE ANTINEOPLASTICS	I2022
	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.	
L1L	PARP INHIBITOR ANTINEOPLASTICS	12022
	Includes products containing niraparib, olaparib, rucaparib, talazoparib, veliparib, etc.	

L1X	ALL OTHER ANTINEOPLASTICS	R2018
L1X1	Alternative preparations for cancer therapy	r2018
	Includes products derived from Viscum (mistletoe).	
L1X2	Out of use	D2022
L1X3	HDAC inhibitor antineoplastics	I2018
	Includes products containing HDAC inhibitors for neoplasms, eg belinostat, entinostat, panobinostat, romidepsin, tucidinostat, vorinostat, etc.	
L1X4	Out of use	D2022
L1X5	CAR T-cell therapy antineoplastics	I2019
	Includes products containing axicabtagene ciloleucel, tisagenlecleucel, etc.	
L1X6	Hedgehog pathway inhibitor antineoplastics	I2022
	Includes products containing glasdegib, sonidegib, vismodegib, etc.	
L1X8	Photosensitisers for cancer therapy	r2019
	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.	

# 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. Products containing BCG vaccine for cancer are classified here; those for general immunostimulation are classified in L3A9. Products containing BCG vaccine for active immunisation against tuberculosis are classified in J7D6.

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	r2020
	Buserelin, deslorelin, goserelin, nafarelin, leuprorelin and triptorelin are classified here. When these substances are not used as cytostatics they are classified in H1C. Products containing gonadotrophin-releasing hormone analogues for cancer and also for other conditions are classified here.	
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	r2019
	Includes aminoglutethamide, anastrozole, exemestane, formestane, letrozole.	
	Products containing both ribociclib and letrozole are classified in L1H5.	
L2B9	Other cytostatic hormone antagonists	r2022
	Includes fulvestrant. Products containing relugolix for cancer are classified here. Products containing relugolix (single ingredient) for uterine fibroids or endometriosis are classified in H1C3. Products containing relugolix in combination with oestrogens and progestogens for uterine fibroids are classified in G3X.	

L3	IMMUNOSTIMULATING AGENTS	I1994
L3A	IMMUNOSTIMULATING AGENTS EXCLUDING INTERFERONS	R2004
L3A1	Colony-stimulating factors	r2018
	Includes ancestim, empegfilgrastim, filgrastim, lenograstim, molgramostim, pegfilgrastim, sargramostim.	
L3A9	All other immunostimulating agents excluding interferons	r2021
	Includes cridanimod, glatiramer acetate, interleukin-2, picibanil.	
	Corynebacterium parvum and levamisole are classified here when used as immunostimulants.	
	Products containing BCG vaccine for cancer are classified in L1X9; those for general immunostimulation are classified here. Products containing BCG vaccine for active immunisation against tuberculosis are classified in J7D6.	
	Products containing elapegademase or pegademase for severe combined immunodeficiency disease (SCID) associated with a deficiency of adenosine deaminase are classified here.	
L3B	INTERFERONS	r2018
	Products containing interferons (with or without ribavirin) for multiple indications are classified in L3B. Products containing interferons (with or without ribavirin) for hepatitis only are classified in J5D1.	
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	r2020
	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 psoriatic conditions only are classified in D5B. Products containing apremilast for multiple conditions are classified in L4X.	
L4C	INTERLEUKIN INHIBITORS	r2021
	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 brodalumab, ixekizumab, secukinumab or ustekinumab and indicated for skin conditions such as psoriasis and also other non-skin conditions, eg rheumatoid arthritis, are classified here. Psoriatic arthritis is defined as a skin condition.	
	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.	
	Products containing mepolizumab for asthma only or for asthma and EGPA (eosinophilic granulomatosis with polyangiitis) are classified in R3M.	
	Products containing dupilumab for atopic dermatitis are classified in D5X. Products containing dupilumab for both atopic dermatitis and asthma are classified here.	
	Products containing levilimab for use in COVID-19 are classified here.	

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 for psoriatic skin conditions only, are classified in D5B. Psoriatic arthritis is defined as a skin condition. Products containing apremilast for multiple conditions are classified here.

Products containing lenalidomide, pomalidomide or thalidomide for multiple myeloma and other cancers are classified in L1K. Products containing thalidomide for both cancer and erythema nodosum leprosum (ENL) are classified in L1K. Products containing thalidomide for erythema nodosum leprosum only are classified here.

Products containing baricitinib, tofacitinib or upadacitinib (JAK inhibitors) for multiple conditions are classified here. Products containing baricitinib, tofacitinib or upadacitinib for rheumatoid arthritis only are classified in M1C.

Products containing leflunomide for multiple conditions are classified here. Products containing leflunomide for rheumatoid arthritis only are classified in M1C.

Corticosteroids are not classified here.

M	MUSCULO-SKELETAL SYSTEM	
M1	ANTI-INFLAMMATORY AND ANTI-RHEUMATIC PRODUCTS	
M1A	ANTI-RHEUMATICS, NON-STEROIDAL	r2009
	Includes all non-hormonal anti-inflammatory products for systemic treatment of musculoskeletal inflammation. Products for analgesia only are classified in N2B.	
M1A1	Anti-rheumatics, non-steroidal plain	r2020
	Includes products containing an additional non-therapeutic ingredient or an ingredient to minimise the side-effects of the main active substance. Examples include alkalizing agents, local anaesthetics or cytoprotectants. For example, combinations of non-steroidals with antiulcerants, where the antiulcerant is for gastric protection, are classified here.	
M1A2	Anti-rheumatics, non-steroidal combination	R2007
	Combination products containing colchicine, or minerals, vitamins, rutin should be classified here. Combinations of anti-inflammatory substances with analgesics for musculoskeletal conditions are classified here. Includes coxib combinations.	
M1A3	Coxibs, plain	R2007
	Includes products that are highly specific to the COX-2 enzyme. At therapeutic doses, they specifically inhibit cyclo-oxygenase-2 (COX-2) but do not inhibit the cyclo-oxygenase-1 (COX-1) isoenzyme. Products in this class include celecoxib, etoricoxib, parecoxib, rofecoxib and valdecoxib.	
M1B	ANTI-RHEUMATIC CORTICOSTEROID COMBINATIONS	
	Includes all systemic steroid combinations specifically or primarily indicated in rheumatic disorders. Examples include corticosteroids with one or more of the following ingredients:	
	non-hormonal anti-inflammatory agents Analgesics Vitamins	
	muscle relaxants.	

### M1C SPECIFIC ANTI-RHEUMATIC AGENTS

r2022

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 baricitinib, tofacitinib or upadacitinib, and indicated for rheumatoid arthritis only, are classified here. Products containing baricitinib, tofacitinib or upadacitinib for multiple conditions are classified in L4X.

Products containing leflunomide, and indicated for rheumatoid arthritis only, are classified here. Products containing leflunomide for multiple conditions are classified in L4X.

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.

Psoriatic arthritis is defined as a skin condition.

M2	TOPICAL ANTI-RHEUMATICS		
M2A	TOPICAL ANTI-RHEUMATICS AND ANALGESICS	r2009	
	Includes rubefacients for topical treatment of muscular disorders (excluding products for the treatment of dermatological conditions, antivaricose products, etc). Products in this group may also contain suprarenal cortex (small amount of corticosteroid). Topical formulations of products in M1A and M5X are classified here, for example topical products containing chondroitin and glucosamine.		

M3	MUSCLE RELAXANTS	R2006
	All products containing muscle relaxants, irrespective of formulation, are classified here. Combinations of muscle relaxants with other substances are classified here (except systemic corticosteroids, see M1B).	
M3A	MUSCLE RELAXANTS, PERIPHERALLY ACTING	R1994
	Includes eg alcuronium, atracurium, botulinum toxin, dantrolene (directly-acting), dimethyltubocurarine, doxacurium, gallamine, hexafluronium, pancuronium, pipecuronium bromide, suxamethonium, tubocurarine, vecuronium.	
МЗВ	MUSCLE RELAXANTS, CENTRALLY ACTING	R2006
	Includes eg afloqualone, baclofen, carisoprodol, chlormezanone, chlorphenazine, chlorzoxazone, cyclobenzaprine, eperisone, febarbamate, mephenosalone, methocarbamol, orphenadrine citrate, phenprobamate, phenyramidol, pridinol mesylate, styramate, thiocolchicoside, tizanidine, tolperisone.	

M4	ANTI-GOUT PREPARATIONS	
M4A	ANTI-GOUT PREPARATIONS	
	Includes anti-gout preparations containing probenecid, colchicine, etc for the treatment of hyperuricaemia.	
	Combinations of colchicine with antirheumatic non-steroidals are classified in M1A2.	

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	12007
	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	12002
	Includes other specific products which are used for osteoporosis (eg ipriflavone).	

M5X	ALL OTHER MUSCULOSKELETAL PRODUCTS	r2021
	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.	
	Products containing burosumab for X-linked hypophosphataemia are classified here.	
	Products containing mexiletine for non-dystrophic myotonic disorders are classified here; products containing mexiletine for cardiac arrhythmias are classified in C1B.	
	Products containing diclofenamide for primary periodic paralysis are classified here. Products containing diclofenamide for glaucoma are classified in S1E1. Products containing diclofenamide for diuretic use are classified in C3A9.	

M6	Out of use; can be reused from 2009.	D2006
M6A	Out of use; can be reused from 2009.	D2006

N	NERVOUS SYSTEM	R2007
N1	ANAESTHETICS	
N1A	ANAESTHETICS, GENERAL	
N1A1	Inhalation general anaesthetics	r2010
	Gas cylinders for hospital use are classified here.	
N1A2	Injectable general anaesthetics	r2020
	Also includes injectable sedatives, eg midazolam, given for the induction and maintenance of anaesthesia, for the sedation of ventilator - dependent patients (intubation) and as sedative/premedication for surgical procedures.	
	Products containing esketamine for general anaesthesia are classified here; products containing esketamine for depression are classified in N6A9.	
N1B	ANAESTHETICS, LOCAL	R2007
	Includes local injectable and topical anaesthetics intended for surgery, surgical and medical procedures, and associated pain relief. Included are eg articaine, bupivacaine, chloroprocaine, dibucaine, etidocaine, lidocaine, mepivacaine, mesocaine, prilocaine, procaine, ropivacaine, tetracaine.	
	Only single active ingredient products or combinations of different local anaesthetics are classified under N1B. Specific single-ingredient ophthalmological local anaesthetics are classified in S1H. Combinations of local anaesthetics with vasoconstrictors eg adrenaline, are classified here. Products containing either local anaesthetics only or other substances in combination with local anaesthetics and intended for indications other than surgery or associated pain relief are classified under eg A1A, D4A, R2A or S1H according to the indication. Products containing local anaesthetics used specifically for premature ejaculation are classified in G4X.	
N1B1	Anaesthetics local, medical injectables	I1998
	Injectable local anaesthetic products intended for local, regional or central nerve block except for products intended for nerve block in dental practice which should be classified in N1B2.	
N1B2	Anaesthetics local, dental injectables	11998
	Injectable local anaesthetic products intended for local, regional or central nerve block in dental practice. These products usually contain higher concentrations of vasoconstrictor or are presented in cartridges which are applicable to a dental injection system.	

N1B3	Anaesthetics local, topical	I1998
	Topical or surface local anaesthetic products intended for anaesthesia of skin and mucous membranes.	
N1B9	Anaesthetics local, others	R1999
	Local anaesthetic products not classified elsewhere, eg cooling sprays and solutions used in medical procedures, topical products containing benzocaine, etc.	

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.	

N2C2	Antimigraine CGRP antagonists	I2020
	Includes products containing CGRP (calcitonin gene-related peptide) antagonists, for example, atogepant, eptinezumab, erenumab, fremanezumab, galcanezumab, rimegepant, ubrogepant, etc.	
N2C9	All other anti-migraine preparations	r2015
	Includes products containing indoramin alone if indicated for migraine.	

N3	ANTI-EPILEPTICS		l
N3A	ANTI-EPILEPTICS	r2011	
	Also includes products for non-epileptic convulsions, eg in pregnancy.		
	Products containing clonazepam are classified here. Products containing gabapentin or pregabalin for either epilepsy or neuropathic pain are classified here.		

N4	ANTI-PARKINSON DRUGS	
N4A	ANTI-PARKINSON DRUGS	r2011
	Bromocriptine preparations containing from 5 mg to 10mg (tablets) are classified here. Products containing lower doses of bromocriptine for endocrinological disorders/lactation suppression are in G2D. In Japan, all bromocriptine products are classified here.	
	Products containing ropinirole or similar substances for restless leg syndrome are classified here.	

N5	PSYCHOLEPTICS	
N5A	ANTIPSYCHOTICS	R2005
	Combinations with psychoanaleptics eg antidepressants are classified in N6C.	
N5A1	Atypical antipsychotics	R2005
	Includes products containing substances such as amisulpride, aripiprazole, clozapine, olanzapine, quetiapine, remoxipride, risperidone, sertindole, ziprasidone, zotepine.	
N5A9	Conventional antipsychotics	R2005
	Includes eg phenothiazines, thioxanthenes, butyrophenones. Also includes sulpiride, in all countries except Japan, Korea and Taiwan where it is classified in A2B9 (all other anti-ulcerants).	
N5B	HYPNOTICS/SEDATIVES	r2008
	Products for sleep rhythm disturbances containing melatonin only are classified in H4X. Products for insomnia that contain a hypnotic/sedative plus melatonin are classified in N5B in the appropriate subclass (N5B2, N5B4 or N5B5).	
N5B1	Non-barbiturates, plain	r2009
	Includes benzodiazepines indicated exclusively for the treatment of insomnia, eg nitrazepam, flurazepam. Prolonged-release melatonin is classified here when indicated for primary insomnia. Products containing melatonin only and indicated for sleep rhythm disturbances are classified in H4X.	
N5B2	Non-barbiturates, combinations	
N5B3	Barbiturates, plain	
N5B4	Barbiturates, combinations	
N5B5	Herbal hypnotics/sedatives	r2009
	Includes products containing one or more herbal substances. Products classified here can also contain other non-sedative substances. Prolonged-release melatonin indicated for primary insomnia is classified in N5B1. Melatonin (any form/strength) in combination with a hypnotic/sedative is classified in the appropriate N5B subclass. Other products in N5B containing both herbal and non-herbal substances are classified according to the non-herbal substance.	

N5C	TRANQUILLISERS	R2004
	Includes minor tranquillisers, eg benzodiazepines, hydroxyzine, meprobamate, but excludes benzodiazepines indicated exclusively for the treatment of insomnia, eg nitrazepam, flurazepam (N5B1). Combinations with psychoanaleptics are classified in N6C. Products containing clonazepam are classified in N3A.	

N6	PSYCHOANALEPTICS EXCLUDING ANTI-OBESITY PREPARATIONS	
N6A	ANTI-DEPRESSANTS AND MOOD STABILISERS	R2003
	Includes substances used in the treatment of depression and mood stabilisation. Combinations with ataractics are classified in N6C.	
N6A1	Out of use; can be reused from 2009.	D2006
N6A2	Antidepressants, herbal	R2006
	Includes products containing herbal substances only, eg St. John's Wort. Products containing both a synthetic and a herbal substance are classified in N6A4, N6A5 or N6A9.	
N6A3	Mood stabilisers	R2006
	These products affect the manic phases of bipolar disorders, eg products containing lithium. Includes products containing valproate semisodium when indicated exclusively for mood stabilisation.	
N6A4	SSRI antidepressants	r2014
	Selective serotonin re-uptake inhibitor antidepressants. Includes eg citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, sertraline.	
	Products containing paroxetine (7.5mg daily) and indicated for menopausal vasomotor symptoms are classified in G2X9.	
N6A5	SNRI antidepressants	I2006
	Serotonin-noradrenaline re-uptake inhibitor antidepressants. Includes eg duloxetine when used in depression, milnacipran, venlafaxine.	
N6A9	Antidepressants, all others	r2020
	Includes eg amitriptyline, clomipramine, imipramine, mirtazapine, vortioxetine. Products containing esketamine for depression are classified here; products containing esketamine for general anaesthesia are classified in N1A2.	
N6B	PSYCHOSTIMULANTS	R2004
	Includes drugs which increase the psychic and physical performance and which have a fatigue depressing, stimulating effect, eg fentyllines, fencamfamine, methylphenidate, amphetamines (excluding their use in obesity, see A8A). Atomoxetine is classified in N7X.	

### N6C PSYCHOLEPTIC-PSYCHOANALEPTIC COMBINATIONS r2010 Includes combinations of tranquillisers and/or antipsychotics with antidepressants. N<sub>6</sub>D **NOOTROPICS** A class of psychoactive drugs which are claimed to have a selective action on integrative functions of the CNS. Their action is alleged to be particularly associated with intellectual function, learning and memory. Includes preparations containing substances such as piracetam, pyritinol, pyrisuccideanol maleate, meclofenoxate, cyprodenate and their combinations with other substances, excluding those products with a vasodilatory action (see C4A). Combinations with cardiac glycosides are classified in C1A2. N<sub>6</sub>E NEUROTONICS AND OTHER MISCELLANEOUS PRODUCTS Includes products not classified above such as single or combination products containing bisibutiamin, deanol and derivatives, GABA, GABOB, N-acetyl asparaginic acid, glutaminic acid and salts, kavain, phospholipid, succinodinitrate.

# N7 OTHER CNS DRUGS R1996 N7A MULTIPLE SCLEROSIS PRODUCTS r2022 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 of atumumab for cancer are classified in L1G1. Products containing other substances, eg corticosteroids, immunosuppressants such as azathioprine, that have multiple uses, are classified elsewhere. N<sub>7</sub>B 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	r2021
	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.	
	Products containing tafamidis for transthyretin amyloid polyneuropathy (TAP) only are classified here. Products containing tafamidis for transthyretin amyloid cardiomyopathy (TAC) only are classified in C1X. Products containing tafamidis for both TAP and TAC are classified here.	
	Products containing inebilizumab or satralizumab for neuromyelitis optica spectrum disorder (NMOSD) are classified here.	

P	PARASITOLOGY	
P1	ANTIPROTOZOALS AND ANTHELMINTICS	R2003
P1A	AMOEBICIDES	R2006
	Includes products whose major indication is amoebiasis. Trichomonacides, eg metronidazole, will be classified in G1A or J8B, except when they are used primarily as amoebicides. Products indicated for both trichomoniasis and amoebiasis are classified in G1A1.	
P1B	ANTHELMINTICS, EXCLUDING SCHISTOSOMICIDES	
	In an anthelmintic combination product the anthelmintic component takes precedence over other components.	
P1C	SCHISTOSOMICIDES	
	Products used to treat bilharziasis.	
P1D	ANTI-MALARIALS	r2018
	If a product contains an antimalarial ingredient and also a second ingredient which is not a specific antimalarial, then this is considered a single-ingredient antimalarial.	
	Vaccines against malaria are classified in J7F1.	
P1D1	Anti-malarials, single ingredient	12000
P1D2	Anti-malarials, multi-ingredient	12000
P1E	Out of use; can be reused from 2006.	D2003
P1F	Out of use; can be reused	
P1G	OTHER ANTI-PARASITIC AGENTS	R1998
	Includes products for the treatment of leishmaniasis and toxoplasmosis.  Pentamidine (used to treat Pneumocystis carinii) is classified here.	

Р3	ECTOPARASITICIDES, INCLUDING SCABICIDES, INSECTICIDES AND REPELLENTS	I2003
P3A	ECTOPARASITICIDES, INCLUDING SCABICIDES	12003
	Includes scabicides and products for the eradication of lice and fleas.	
РЗВ	INSECTICIDES AND REPELLENTS	I2003
	Includes pyrethrines.	

R	RESPIRATORY SYSTEM	
R1	NASAL PREPARATIONS	
R1A	TOPICAL NASAL PREPARATIONS	R1993
R1A1	Nasal corticosteroids without anti-infectives	R2007
	Includes all products containing corticosteroids (plain or in combination with other compounds) but excludes all those containing an anti-infective. Products indicated for both asthma and rhinitis are classified in R3D1.	
R1A2	Out of use; can be reused from 1997.	D1994
R1A3	Nasal corticosteroids with anti-infectives	R1994
	Includes all products containing both a corticosteroid and an anti-infective.	
R1A4	Nasal anti-infectives without corticosteroids	R1994
	Includes all products containing anti-infectives (plain or in combination with other compounds) but excludes all those containing a corticosteroid.	
R1A5	Out of use; can be reused from 1997.	R200 <b>7</b>
R1A6	Nasal antiallergic agents	R2003
	Includes all nasal preparations containing an antihistamine or antiallergic compound (plain or in combination) eg azelastine, cromoglicic acid, ketotifen, levocabastine. Products containing both a nasal form and an ophthalmic form in the same pack are classified here.	
R1A7	Nasal decongestants	R2005
	Includes all products containing decongestants. Decongestants in combination with anti-allergics will be classified in R1A6. Includes specific nasal formulations.	
R1A9	Other topical nasal preparations	R2005
	Nasal products containing anticholinergics, antivirals, antifungals and antiseptics are classified here. Also included are topical nasal saline solutions. Includes specific nasal formulations.	

## R1B SYSTEMIC NASAL PREPARATIONS R1994

Includes all preparations indicated primarily for rhinitis, allergic rhinitis, sinusitis, catarrh, nasal congestion and other similar conditions. This group includes preparations containing decongestants with or without antihistamines, but excludes those containing analgesics, antitussives and vitamins together with those which are primarily indicated for colds and influenza which are classified in R5A.

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).	

R3	ANTI-ASTHMA AND COPD PRODUCTS	r2016
	This group includes all preparations indicated for bronchial asthma and chronic obstructive pulmonary disease (COPD). It consists of preparations with bronchodilatory, broncho-spasmolytic or anti-asthmatic activity.	
	Bronchodilators combined with expectorants or mucolytics are generally classified in R5C.	
	The need to classify combination products has led to the adoption of a hierarchical system with R3A ingredients taking precedence over R3B etc. Due to the importance of specific combinations, there are some exceptions included in R3C, R3E, R3F, and R3L.	
R3A	<b>B2-AGONISTS</b>	r2016
	This class includes the following substances - bambuterol, bitolterol, carbuterol, clenbuterol, fenoterol, formoterol, isoetarine, isoprenaline, orciprenaline, pirbuterol, procaterol, reproterol, rimiterol, salbutamol, salmeterol, terbutaline, tulobuterol.	
	Excluded are combinations of B2-agonists with non-steroidal respiratory anti- inflammatories (R3E) and combinations of B2-agonists with corticoids (R3F) and combinations of B2-agonists with anticholinergics (with or without corticosteroids) (R3L).	
R3A1	Out of use; can be reused in 2005.	D2002
R3A2	B2-agonists, systemic	r2016
R3A3	Long-acting B2-agonists, inhalant	r2022
	Includes formoterol, salmeterol and procaterol. Includes liquids and capsules to be used as inhalants.	
R3A4	Short-acting B2-agonists, inhalant	r2016
	Includes liquids and capsules to be used as inhalants.	
R3B	XANTHINES	
	This group includes substances such as theophylline, aminophylline, diprophylline etc.	
R3B1	Xanthines, inhalant	
R3B2	Xanthines, systemic	R1993

R3C	NON-STEROIDAL RESPIRATORY ANTI-INFLAMMATORIES	r2016
	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	r2019
	Excluded are combinations of corticoids with B2-agonists (R3F) and LAMA/LABA combinations (R3L3).	
R3D1	Corticoids, inhalant	R2007
	Includes plain inhalant corticosteroids only. Also includes products indicated for both rhinitis and asthma.	
R3D2	Corticoids, systemic	r2019
	This subgroup includes combinations only, with the exception of those classified in R3F and R3L3.	
	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	r2019
	Combinations of LAMA/LABAs with corticosteroids are classified in R3L3.	
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 anticholinergies (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	r2019
	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.	
R3L3	Long-acting anticholinergic combinations with both long-acting B2-agonists and with corticosteroids, inhalant	I2019
	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 anticholinergies (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	r2019
	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).	

R4	CHEST RUBS AND OTHER INHALANTS	
R4A	CHEST RUBS AND OTHER INHALANTS	R2005
	Includes chest rubs and other inhalants (such as nasal decongestants and baths excluding specific nasal formulations) which are not classified under R1A, R2A, R3A or R5C; also includes medical sprays for disinfecting the air in sick rooms as a prophylactic against colds, etc.	

R5	COUGH AND COLD PREPARATIONS	
R5A	COLD PREPARATIONS WITHOUT ANTI-INFECTIVES	R1994
	This group consists of all products indicated for colds, influenza, etc. It therefore includes combination products such as those containing antihistamines with decongestants, analgesics, antipyretics, vitamins, etc and since symptoms of colds and influenza may include a cough, an antitussive, and possibly an expectorant may also be included (see also R5D2 and R5C).	
R5B	COUGH/COLD PREPARATIONS WITH ANTI-INFECTIVES	r2016
	Includes combinations with anti-infectives (including antivirals) indicated specifically for coughs, colds, influenza and other respiratory conditions. Combinations of antiseptics with expectorants are classified in R5C and with antitussives are classified in R5D2.	
R5C	EXPECTORANTS	r2021
	'Expectorants' mean substances with secretolytic or secretomotoric activity, so that mucolytics are classified in this group.	
	The group includes all cough preparations with an expectorant as the main ingredient (eg guaiacol, saponin, ammonium chloride). These may also include antihistamines and bronchodilators but excluded are combinations of expectorants with antitussives (R5D2), with analgesics and antipyretics (R5A), and with anti-infectives (R5B). Lozenges indicated for cough and containing expectorants are classified here. Products containing dornase alfa for cystic fibrosis are classified here.	
R5D	ANTITUSSIVES	
R5D1	Plain antitussives	
	Includes all plain antitussives.	
R5D2	Antitussives in combinations	R1994
	Includes combinations with expectorants, antihistamines, ephedrine, herbal tinctures, etc. Excluded are combinations with analgesics and antipyretics (R5A) and combinations with anti-infectives (R5B).	
R5E	Out of use; can be reused.	

R5F	OTHER COUGH AND COLD PREPARATIONS	r2009	
	This group includes: - combinations without a clearly expectorating or antitussive effect; - lozenges indicated for cough unless they contain anti-infectives, R5B or antitussives, R5D, or expectorants, R5C); - expectorant teas.		

<b>R6</b>	SYSTEMIC ANTIHISTAMINES	
R6A	SYSTEMIC ANTIHISTAMINES	R2003
	Includes all systemic antihistamines, plain and in combination, not classified elsewhere.	
	Antihistamines in combination with decongestants are classified in R1B.	
	Terfenadine in Japan is classified in R3C; in all other countries it is classified here.	

<b>R7</b>	OTHER RESPIRATORY SYSTEM PRODUCTS	
R7A	RESPIRATORY STIMULANTS	R2006
	Includes centrally acting respiratory stimulants such as lobeline, ethamivan, crotetiamide, croptopamide, nikethamide and doxapram (plain only).	
	Also includes products specifically indicated for primary apnoea in premature newborn babies.	
R7B	CYSTIC FIBROSIS PRODUCTS	I2021
	Products containing dornase alfa for cystic fibrosis are classified in R5C.	
R7B1	Cystic fibrosis transmembrane regulator (CFTR) modulators	I2021
	Includes products containing eg elexacaftor, ivacaftor, lumacaftor, tezacaftor, etc for cystic fibrosis.	
R7C	LUNG SURFACTANTS	I1996
	Includes substances such as colfoscaril palmitate used in neonatal respiratory distress syndrome.	
R7D	IDIOPATHIC PULMONARY FIBROSIS PRODUCTS	I2021
	Includes products containing eg pirfenidone, nintedanib, etc for idiopathic pulmonary fibrosis.	
	Products containing nintedanib for idiopathic pulmonary fibrosis only are classified here. Products containing nintedanib for cancer only are classified in L1H9. Products containing nintedanib for both cancer and idiopathic pulmonary fibrosis are classified here.	
R7X	ALL OTHER RESPIRATORY SYSTEM PRODUCTS	r2021

S	SENSORY ORGANS	
S1	OPHTHALMOLOGICALS	
S1A	OPHTHALMOLOGICAL ANTI-INFECTIVES	r2009
	Includes plain anti-infectives (antibacterials eg sulphonamides, and antifungals) and all anti-infective combinations with the exception of corticosteroid/anti-infective combinations (S1C). Also excluded are antiseptics (S1G6) and antivirals (S1D).	
S1B	OPHTHALMOLOGICAL CORTICOSTEROIDS	
	Includes plain corticosteroids and all corticosteroid combinations, with the exception of corticosteroid/anti-infective combinations (S1C).	
S1C	OPHTHALMOLOGICAL ANTI-INFLAMMATORY/ANTI-INFECTIVE COMBINATIONS	R2001
S1C1	Ophthalmological corticosteroid and anti-infective combinations	I2001
S1C2	Ophthalmological NSAIDS and anti-infective combinations	I2001
S1C9	Other ophthalmological anti-inflammatory and anti-infective combinations	I2001
S1D	OPHTHALMOLOGICAL ANTIVIRAL AGENTS	r2008
	Includes aciclovir, iododesoxycytidine, idoxuridine, 5-ethyl-2' deoxyuridine, trifluridine, tromantadine, vidarabine. Systemic forms of products for cytomegalovirus retinitis are classified in J5B3.	
S1E	MIOTICS AND ANTIGLAUCOMA PREPARATIONS	
S1E1	Miotics and antiglaucoma preparations, systemic	r2021
	Includes carboanhydrase inhibitors (acetazolamide, diclofenamide and methazolamide), only when they are specifically promoted and used for the treatment of glaucoma (see also C3A9). Products containing diclofenamide for primary periodic paralysis are classified in M5X and for diuretic use are classified in C3A9.	
S1E2	Miotics and antiglaucoma preparations, topical	R2007
	Includes parasympathomimetics (acelidine, acetylcholine, clonidine, pilocarpine); anticholinesterases or cholinesterase inhibitors (carbachol, demecarium bromide, distigmine, ecothiopate iodide, isoflurophate (DFP), neostigmine, paraoxon, physostigmine); sympathicolytics (guanethidine); beta-blockers (bupranolol, timolol); sympathomimetics (adrenaline/epinephrine); prostaglandin analogues; carbo-anhydrase inhibitors.	

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.	

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	r2018
	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 aflibercept, anecortave, pegaptanib, ranibizumab, rostaporfin, and verteporfin. Vitamins promoted to prevent AMD are classified in S1M. Products containing aflibercept for cancer are classified in L1X9.	
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.	

S1X	OTHER OPHTHALMOLOGICALS	r2016
	Includes preparations which improve regeneration (iodine); preparations which improve retinal blood flow (heparin, tolazoline); preparations which improve adaptation and all other ophthalmological preparations not mentioned in S1A-S1T. Products used for diabetic retinopathy are classified here.	
S1X1	Other ophthalmologicals, systemic	I1993
S1X2	Other ophthalmologicals, topical	r2016
	Products containing topical sirolimus for chronic non-infectious uveitis are classified here.	

S2	OTOLOGICALS	
S2A	OTIC ANTI-INFECTIVES	
	Includes all ear preparations containing an anti-infective but no steroid. This, therefore, includes both plain anti-infective products, eg penicillin ointment, and those where the anti-infective is one of several ingredients.	
S2B	OTIC CORTICOSTEROIDS	
	Includes all ear preparations containing a steroid but no anti-infective. This, therefore, includes plain steroid products and those where a steroid is one of several ingredients.	
S2C	OTIC CORTICOSTEROID/ANTI-INFECTIVE COMBINATIONS	
	Includes all ear preparations containing both a steroid and an anti-infective, whether alone or with other ingredients.	
S2D	OTHER OTOLOGICALS	R2003
S2D1	Earwax removal products	r2009
	Includes earwax removal products which do not contain either an antibacterial or a steroid.	
S2D9	All other otologicals	r2008
	Products containing acetic acid only, and for otological use, are classified in S2D9.	

## **S3** OPHTHALMOLOGICAL/OTOLOGICAL COMBINATIONS S<sub>3</sub>A **EYE/EAR ANTI-INFECTIVES** All eye/ear preparations containing an anti-infective but no steroid. This, therefore, includes both plain anti-infective products eg penicillin ointment, and those where the anti-infective is one of several ingredients. NB. Antiseptics are not classified as anti-infectives; they belong in S3D. **S3B** EYE/EAR CORTICOSTEROIDS Includes all eye/ear preparations containing a steroid but no anti-infective. This, therefore, includes plain steroid products and those where a steroid is one of several ingredients. S<sub>3</sub>C EYE/EAR CORTICOSTEROID/ANTI-INFECTIVE COMBINATIONS Includes all eye/ear preparations containing both a steroid and an anti-infective, whether alone or with other ingredients. **S3D** OTHER EYE/EAR COMBINATIONS Includes all other products not classified in S3A, S3B or S3C.

T	DIAGNOSTIC AGENTS	I1994
T1	DIAGNOSTIC IMAGING	I1994
T1A	LOW OSMOLAR ANGIO-UROGRAPHY	I1994
T1B	IONIC ANGIO-UROGRAPHY	I1994
T1C	GASTROENTEROGRAPHY	I1994
T1D	CHOLECYSTOGRAPHY AND CHOLANGIOGRAPHY	I1994
T1E	MRI AGENTS	I1994
	Magnetic resonance imaging agents.	
T1F	ULTRASOUND AGENTS	I1994
T1G	RADIODIAGNOSTIC AGENTS	12003
	Includes radiopharmaceutical products used in diagnosis. Radiopharmaceuticals used as therapeutic agents are classified in V3C.	
T1X	OTHER IMAGING AGENTS	r2018
	Products containing aminolaevulinic acid for cancer therapy are classified in L1X8.	

<b>T2</b>	DIAGNOSTIC TESTS	I1994
T2A	Out of use; can be reused from 2005.	D2002
T2B	Out of use; can be reused from 2005.	D2002
T2C	PREGNANCY AND OVULATION TESTS	I2002
T2D	DIABETES TESTS	12002
T2D1	Diabetes tests, urine	r2014
	Includes ketone tests.	
T2D2	Diabetes tests, blood	r2014
	Includes ketone tests.	
T2D9	Diabetes tests, other	I2002
	Includes glucose tolerance tests.	
T2X	ALL OTHER DIAGNOSTIC TESTS	r2022
	Includes tests for coronavirus.	
T2X1	All other diagnostic tests, urine	I2002
T2X2	All other diagnostic tests, blood	12002
T2X9	All other diagnostic tests	12002
	Includes in vivo and in vitro tests.	

Т3	DIAGNOSTIC EQUIPMENT AND ACCESSORIES	I2001
T3A	DIAGNOSTIC EQUIPMENT AND ACCESSORIES	R2004
	Includes equipment and instruments used in diagnostic procedures. Also includes accessories needed for the correct use of diagnostic equipment, eg calibration solutions. Diagnostic strips and kits are classified in T2. However, kits including meters are classified here. Lancets are classified in V7A.	

V	VARIOUS	
V1	ALLERGENS	
V1A	ALLERGENS	R2003
	Includes desensitizing vaccines, histamine injections, etc.	
	Allergens, purely for diagnosis, are classified in T2X9.	

V2	Out of use; can be reused from 1997. Immunomodulators transferred to L3 and L4.	D1994

V3	ALL OTHER THERAPEUTIC PRODUCTS	
V3A	Out of use; can be reused from 2009.	D2006
V3B	KANPO AND CHINESE MEDICINES	
V3B1	Kanpo medicines	R2003
V3B2	Chinese medicines	R2003
V3C	RADIOPHARMACEUTICALS	R2003
	This group includes medical products which are registered on the Japanese pharmacopoeia and radioactive medicament standard and also includes combination products with radioactive nucleus prescribed by standard provisions.	
	This group excludes products used as diagnostics (see T1).	
	Strontium-89 and similar substances used to treat pain of bone metastases are classified here.	
V3D	DETOXIFYING AGENTS FOR ANTINEOPLASTIC TREATMENT	R2005
	Includes amifostine, calcium folinate, calcium levofolinate, dexrazoxane, and mesna when indicated for adjuvant therapy in antineoplastic treatment. Products containing calcium folinate and which have multiple indications are classified here.	
V3E	ANTIDOTES	R2007
	Includes products containing eg dimercaprol, edetates, methionine, protamine, pralidoxime. Zinc acetate for Wilson's disease is classified here.	
V3F	IRON-CHELATING AGENTS	I2006
	Includes products containing eg deferiprone, deferoxamine.	
V3G	HYPERKALAEMIA/HYPERPHOSPHATAEMIA PRODUCTS	R2016
V3G1	Hyperkalaemia products	I2016
	Includes products used specifically for hyperkalaemia, eg those containing calcium polystyrene sulfonate, sodium polystyrene sulfonate, patiromer calcium etc.	

V3G2	Hyperphosphataemia products	I2016
	Includes products used specifically for hyperphosphataemia, eg those containing bixalomer, calcium acetate, calcium acetate in combination with magnesium carbonate, calcium carbonate, colestilan, ferric citrate, lanthanum carbonate, sevelamer, sucroferric oxyhydroxide, etc.	
	Products containing calcium and indicated in both hyperphosphataemia and calcium deficiency are classified in V3G2.	
V3H	ANTI-INFLAMMATORY ENZYMES	R2007
	This group includes all enzyme preparations which are indicated to treat inflammatory conditions. Includes enzyme preparations for respiratory conditions. Excluded are enzyme preparations used in digestive conditions which are classified in A9A. Also excluded are specific cholagogues - classified in A5A, enzymatic topical wound treatments - classified in D3A, enzymes for ophthalmic use - classified in S1S9.	
V3X	ALL OTHER THERAPEUTIC PRODUCTS	r2022
	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.	
	Products containing omega-3 fatty acids for the reduction of triglycerides and/or the prevention and treatment of arteriosclerosis are classified in C10B. Products containing omega-3 fatty acids for other conditions (including supplementation in pregnancy and breastfeeding) or for multiple uses are classified here.	
	Products containing lonafarnib for Hutchinson-Gilford progeria syndrome or progeroid laminopathies are classified here.	
	4 <sup>th</sup> level used only in Germany and Hungary.	
V3X1	Umstimmungsmittel preparations of herbal origin	I2006
	Products which are said to intensify the body's defence against infection.	
V3X4	Cure-all preparations	I2006
	These products have a broad spectrum of indications for internal and external use. Includes products containing a mixture of homeopathic together with allopathic or herbal ingredients. These products can have several indications.	

V3X5	Homeopathic preparations (1)	12006
	Includes single homeopathic dilutions named after the homeopathic ingredient (eg belladonna D3) and complex series. These products can have several indications or the indication is not specified.	
V3X6	Homeopathic preparations (2)	I2006
	Includes homeopathic specialities with a brand name and containing only homeopathic ingredients. These products can have several indications or the indication is not specified.	
V3X7	Dried and cut plants for tea preparations	I2006
	These are packed for sale and have more than one indication, or they are standard registrations.	
V3X9	Other therapeutic preparations	I2006

V4	Out of use; can be reused from 1997. Was incorporated in the T class.	D1994

ANTISEPTICS FOR NON-HUMAN USE	R1999
ANTISEPTICS FOR NON-HUMAN USE	R1999
Includes antiseptic preparations for non-human use only, eg instrument sterilization.	
Products used for both human and non-human use are classified in D8A.	
	ANTISEPTICS FOR NON-HUMAN USE  Includes antiseptic preparations for non-human use only, eg instrument sterilization.

V6	DIETETIC AGENTS	
V6A	SLIMMING PREPARATIONS	R2005
	Includes dietary products (nutrients) used to aid weight reduction. For substances used to treat obesity, see A8. Chitosan (chitin) is classified here when used for weight reduction.	
V6B	PROTEIN SUPPLEMENTS	
	Includes products indicated exclusively for protein deficiency but excluding IV products (see K).	
V6C	INFANT FORMULAS	
V6D	OTHER NUTRIENTS	
	Includes sodium salt substitutes.	

V7	ALL OTHER NON-THERAPEUTIC PRODUCTS	
V7A	ALL OTHER NON-THERAPEUTIC PRODUCTS	
	Includes artificial sweetening agents.	