



# Guidelines for ATCvet classification | 2022

***Guidelines for  
ATCvet classification  
2022***

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**Guidelines for  
ATCvet classification  
24th edition**

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2) Published by the WHO Collaborating Centre for Drug Statistics Methodology

## Preface

The Anatomical Therapeutic Chemical classification system for veterinary medicinal products, ATCvet, has been developed by the Nordic Council on Medicines (NLC) in collaboration with the NLC's ATCvet working group.

The ATCvet system is based on the same main principles as the ATC classification system for substances used in human medicine. The ATCvet system has been developed in association with the WHO Collaborating Centre for Drug Statistics Methodology in Oslo. The WHO Collaborating Centre for Drug Statistics Methodology is responsible for developing and maintaining the ATC system under the guidance of WHO, and has since January 2001 also had the responsibility for the ATCvet classification system. The first edition of the *Guidelines on ATCvet classification* was published in 1992 followed by revised editions in 1995 and in 1999. Since 2002 the Guidelines have been revised annually.

*The ATCvet classification system will be continuously revised in line with the ATC system and in response to the expanding range of preparations available in the field of veterinary medicine.*

Details of the classification codes assigned to all the substances classified can be found in the *ATCvet Index*, which is issued annually. The *Guidelines on ATCvet classification* are needed to explain and provide comments on the classifications recommended.

Copies of the Guidelines and the Index can be ordered from the WHO Collaborating Centre for Drug Statistics Methodology.

The *ATCvet Index*, as well as further information about the ATCvet classification system, is also available at the website of the WHO Collaborating Centre, <http://www.whocc.no/atcvet/>.

Oslo, April 2022

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<i>QA</i> - <i>Alimentary tract and metabolism</i> .....	20
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This group comprises preparations used for the treatment of diseases affecting the alimentary tract or metabolism, e.g. antacids and antiemetics. It also includes e.g. antispasmodic and anticholinergic agents, vitamins and drugs used in diabetes.

<i>QB</i> - <i>Blood and blood forming organs</i> .....	36
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The group QB comprises preparations mainly affecting the blood or the blood forming organs. For example, it includes antithrombotic agents, antianemic preparations and plasma substitutes.

<i>QC</i> - <i>Cardiovascular system</i> .....	41
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This group comprises preparations used in the treatment of diseases affecting the cardiovascular system, or whose action is believed to be mediated mainly via the cardiovascular system. Included are, for example, antihypertensives and drugs for cardiac diseases.

<i>QD - Dermatologicals</i> .....	53
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This main group comprises dermatological preparations. Most of these preparations are intended for topical use, e.g. antifungals, antibiotics, corticosteroids and antiseptics for topical use.

<i>QG - Genito-urinary system and sex hormones</i> .....	64
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The group QG comprises gynecological antiinfectives and antiseptics for local and intravaginal/intrauterine use. In addition e.g. urologicals and hormonal contraceptives are included.

<i>QH - Systemic hormonal preparations, excl. sex hormones and insulins</i> .....	73
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This group comprises hormonal preparations for systemic use, excluding sex hormones and insulins. Included are also, for example, pancreatic hormones and hormonal preparations acting on calcium homeostasis.

<i>QI - Immunologicals</i> .....	78
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This group comprises immunologicals for veterinary use and includes vaccines, immune sera and immunoglobulins. The group QI does not correspond to the ATC classification of immunologicals for human use.

<i>QJ - Antiinfectives for systemic use</i> .....	94
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Group QJ comprises antiinfectives, antibacterials and antimycobacterials for systemic and intramammary use. Antiinfectives for local use are classified in other groups.

<i>QL - Antineoplastic and immunomodulating agents</i> .....	105
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The group QL comprises preparations, e.g. alkylating agents, antimetabolites, plant alkaloids and cytotoxic antibiotics, used in the treatment of malignant neoplastic diseases. Immunomodulating agents, both stimulating and suppressive agents, are also classified here.

<i>QM - Musculo-skeletal system</i> .....	111
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Preparations used for the treatment of disease in or symptoms of the musculo-skeletal system can be classified in this group. Many drugs classified in this group, as the antiinflammatory agents, commonly affect other organs as well. Included are both topical preparations and products for systemic use.

<i>QN - Nervous system</i> .....	116
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Preparations affecting the nervous system, both centrally and peripherally, are classified in this group. Antidepressants and antipsychotics, for example, are included. Group headings are kept consistent with the ATC system.

<i>QP - Antiparasitic products, insecticides and repellents</i> .....	128
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Group QP comprises antiparasitic preparations, including antiprotozoals, insecticides and repellents for local and systemic use. The ATCvet classification for this group does not correspond to the classification for group P in the ATC system.

<i>QR - Respiratory system</i> .....	134
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Preparations for the treatment of diseases in the respiratory system, i.e. the nose, throat and lungs, are classified in this group. Included are e.g. cough suppressants and adrenergics for the treatment of bronchial asthma. Group headings are kept consistent with the ATC system.

<i>QS - Sensory organs</i> .....	142
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Preparations for topical treatment of diseases in the sensory organs, i.e. the eyes and the ears, are classified in this group. Ophtalmologicals, both curative preparations and surgical aids, and otologicals, are included.

<i>QV - Various</i> .....	149
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Most preparations assigned to this group cannot be classified in any other anatomical main group. Some of the preparations could also be classified as medical devices or general nutrients. The classification of most preparations is based on the ATC classifications for human medicine.



## 1 Introduction to the ATCvet classification system

### 1.1 History of the ATC/DDD- and the ATCvet systems

The basis for the ATCvet classification system is the ATC (Anatomical Therapeutic Chemical) classification system for human medicines, which was developed in Norway in the early seventies. The use of the ATC classification and the DDD (Defined Daily Dose defined as the assumed average daily dose of a substance used in its main indication in adults) as a unit of measurement was introduced in the Nordic countries in 1976.

In 1982, the WHO Regional Office for Europe established the WHO Collaborating Centre for Drug Statistics Methodology in Oslo. The main tasks of the Centre are to develop and maintain the ATC/DDD system, and to stimulate and influence the practical use of the ATC system by co-operating with researchers in the drug utilization field.

In 1996 WHO Headquarters in Geneva decided to recommend the ATC/DDD system as an international standard for drug utilization studies. The WHO appointed an expert group for the ATC/DDD system. The WHO International Working Group for Drug Statistics Methodology includes people from all regions. The Group meets twice annually.

The Nordic Council on Medicines established the ATCvet classification system in 1990. In January 2001, the ATCvet was taken over by the WHO Collaborating Centre. The Norwegian authorities fund the work with ATCvet.

### 1.2 The purpose of the ATCvet classification system

ATCvet is a system for the classification of substances intended for therapeutic use and can serve as a tool for the classification of medicinal products.

The ATCvet system provides an administrative tool for putting groups of drugs into systems according to therapeutic categories. The aim is to:

- facilitate exchanges of data for pharmacovigilance studies;
- improve the comparability of statistics on sales of veterinary medicinal products;
- provide authors of scientific articles with a tool for identifying medicines; and
- help veterinarians and pharmacists in their everyday work.

In many European countries, veterinary medicinal products are presented in accordance with the ATCvet system in *drug catalogues*, and the system is used as an *administrative tool* by the health authorities. Since many substances are used in both human and veterinary medicine, the possibility of linking the classification systems for the two areas is of considerable value. The ATCvet system is therefore being developed in close association with the ATC system.

### **1.3 Relationship between the ATCvet system and the ATC system for medicines for human use**

These Guidelines for ATCvet classification should be read in conjunction with the Guidelines for ATC classification and DDD assignment, which provide detailed information regarding ATC classification.

([https://www.whocc.no/atc\\_ddd\\_index\\_and\\_guidelines/guidelines/](https://www.whocc.no/atc_ddd_index_and_guidelines/guidelines/))

The ATCvet system is based on the ATC system for substances used in human medicine. Many of the substances may thus not have a well-established use or may be of limited relevance for veterinary medicine. However, pharmacotherapy in veterinary medicine is rapidly developing, and substances and groups of drugs regarded to be of limited relevance some years ago, are now included in armamentarium of the veterinarians.

The ATCvet system as it is outlined in the ATCvet Index and Guidelines for ATCvet classification should be regarded as a maximum selection to choose from when classifying products in veterinary medicine. Derived from the ATC system the ATCvet system is modified with some minor adaptations created to better fit the system to its purpose. In most cases an ATCvet code can be created by placing the letter Q in front of an existing ATC code in the human ATC system when classifying a product in the ATCvet system. In some cases, specific ATCvet codes are created. An additional 1<sup>st</sup> level, QI - Immunologicals, is also included to accommodate vaccines and immunologicals according to species. The ATCvet system is updated annually.

### **1.4 The ATCvet classification system**

In both the ATC and the ATCvet system, preparations are divided into groups according to their therapeutic use. First, they are divided into 15 *anatomical groups* (1st level), classified as QA-QV in the ATCvet system.

Within most of the 1st level groups, preparations are subdivided into different *therapeutic main groups* (2nd level), coded for example as QA01, QA02, QA03. Two levels of *chemical/therapeutic/pharmacological subgroups* (3rd and 4th levels), e.g. QA02A, QA02B at the 3rd level and QA02AA, QA02AB etc at the 4th level, provide further subdivisions. At a 5th level, e.g. QA02AA01, *chemical substances* are classified.

**Anatomical groups (1st level):**

ATCvet	ATC
<b>1st level</b>	
QA Alimentary tract and metabolism	A
QB Blood and blood forming organs	B
QC Cardiovascular system	C
QD Dermatologicals	D
QG Genito-urinary system and sex hormones	G
QH Systemic hormonal preparations, excl. sex hormones and insulins	H
QI Immunologicals	-

QJ	Antiinfectives for systemic use	J
QL	Antineoplastic and immunomodulating agents	L
QM	Musculo-skeletal system	M
QN	Nervous system	N
QP	Antiparasitic products, insecticides and repellents	P
QR	Respiratory system	R
QS	Sensory organs	S
QV	Various	V

The complete classification of *ampicillin* for systemic use illustrates the structure of the ATC code:

J General antiinfectives for systemic use (1st level, anatomical main group)  
**01** Antibacterials for systemic use (2nd level group, therapeutic main group)  
 C Beta-lactam antibacterials, penicillins (3rd level group, therapeutic subgroup)  
 A Penicillins with extended spectrum (4th level group, chemical/therapeutic subgroup)  
**01** ampicillin (5th level code, subgroup for chemical substance)

Thus, in the ATC system, all plain ampicillin products for systemic use should be classified using the code **J01CA01**.

In most cases an ATC code exists which can be used to classify a product in the ATCvet system. The ATCvet code is then created by placing the letter Q in front of the ATC code.

An ATCvet classification code is thus built up as follows:

*Example:* Ampicillin

Level	1	2	3	4	5
ATC code	J	01	C	A	01
ATCvet code	<b>Q</b> J	01	C	A	01

## 2. Classification principles

### 2.1 General principles

The ATCvet system for the classification of veterinary medicines is based on the same overall principles as the ATC system for substances used in human medicine. In most cases, an ATC code exists which can be used to classify a product in the ATCvet system. The ATCvet code is then created by placing the letter Q in front of the ATC code.

When the human classification is not considered relevant, a specific ATCvet group or 5th level code can be established in order to make the classification more relevant for veterinary medicine. However, such changes are kept down to a minimum in order to leave the two systems as similar as possible.

Usually, specific ATCvet groups are only established for veterinary products whose indications differ from those of similar human products, e.g. immunologicals for veterinary use (QI), antibacterials for intramammary use (QJ51) and gynecological antiinfectives and antiseptics for intrauterine use (QG51).

***Classification according to the main therapeutic use or pharmacological class of a medicinal product***

Every medicinal product is classified according to its main therapeutic use or pharmacological class. One product may be used for two or more equally important indications and the main therapeutic use may differ from species to species and from one country to another.

When a product is used for more than one indication, an ATCvet code is assigned based on its main therapeutic use, as decided by the ATCvet Working Group.

***Different pharmaceutical forms of the same substance***

One substance may be marketed in several pharmaceutical forms. Pharmaceutical forms for topical and systemic use are given separate ATCvet codes, e.g. oxytetracycline is given the following ATCvet codes for its different pharmaceutical forms:

**Oxytetracycline**

QD06AA03 for topical use  
QG01AA07 for gynecological use  
QG51AA01 for intrauterine use  
QJ01AA06 for systemic use  
QJ51AA06 for intramammary use  
QS01AA04 for ophthalmological use

When there are several alternative classifications for a particular substance, explanations and cross-references are given in the Guidelines.

***Drugs classified in the same 4th level group***

Drugs assigned to the same 4th level group should not be considered pharmacotherapeutically equivalent, since their adverse drug reaction profiles, modes of action and therapeutic effects may differ.

Example:

QM02AA *Antinflammatory preparations, non-steroids for topical use*  
QM02AA01 *phenylbutazone*  
QM02AA23 *indometacin*

To avoid a situation of several 4th levels with only one single substance in each, new 4th levels are as a general rule only established when at least two substances with marketing authorisations fit in the group. In addition, a new 4th level should be regarded a benefit for drug utilization research.

### ***'Other' groups***

As a general rule, a new product not clearly belonging to any of the existing ATCvet 4th level groups will be classified in an 'Other' group (usually an X group), e.g. QR06AX - *Other antihistamines for systemic use*. New and innovative medicinal products will therefore often be classified in an X group and such groups could be established for only one single substance.

Example:

QR06AA *Aminoalkyl ethers*  
QR06AA01 *bromazine*  
QR06AB *Substituted alkylamines*  
QR06AB01 *brompheniramine*  
QR06AX *Other antihistamines for systemic use*  
QR06AX01 *bamipine*

### ***Specific veterinary groups***

Specific veterinary groups have been created, e.g. for immunologicals (QI), to allow a subdivision by species. The ATC system's subdivision of sulfonamides on the basis of their biological half-life in humans is irrelevant to veterinary use and a veterinary classification has therefore been established (QJ01EQ). A specific classification has also been established for antiparasitic products (QP), since there are considerable differences in the use of these products and the variety of substances available, compared with the situation in human medicine.

When specific ATCvet codes are created, the following digits/letters in the ATC system are reserved for use in the ATCvet classification system:

level 1: Q  
level 2: 50-69  
levels 3 and 4: Q, V, W, Y and Z  
level 5: 90-99

At level 5, the digits 90-98 are used to classify products containing plain substances, while 99 has been used for combined products.

Example:

QJ51 - *Antibacterials for intramammary use*, and QA07CQ - *Oral rehydration formulations for veterinary use*, are examples of ATCvet codes for which there are no equivalents in the ATC system (i.e. neither J51 nor A07CQ exists in the ATC system).

Classification problems are discussed by the ATCvet Working Group, which then decides on the final classification.

### ***Nomenclature in the ATCvet system***

- International Non-proprietary Names (INN) are preferred.  
If INN names have not been assigned, United States Adopted Names (USAN) or British Approved Names (BAN) are to be chosen. For herbal medicinal products, Latin names are used.

Lists of INN names are published by the World Health Organization (WHO), Geneva, and are published continuously in *WHO Drug Information*. Lists of USAN names are published by the US Pharmacopoeia and lists of BAN names are available in the British pharmacopoeia.

- Non-specific terms like *others* and *various* should be avoided as group/subgroup names whenever possible.

## **2.2 Classification of plain preparations**

Plain preparations are defined as:

Preparations containing one active component (including stereoisomeric mixtures), and additional substances intended to

- increase the stability of the preparations (e.g. acetylsalicylic acid + ascorbic acid), or
- increase the duration of the effect (e.g. depot formulations), or
- increase the absorption of the active component (e.g. different solvents in dermatologicals).

Different salts of the active ingredient are usually given one and the same 5th level ATCvet code, but prodrugs and stereoisomers with differing pharmacological activity may be assigned separate 5th level codes.

## **2.3 Classification of combination products**

Products containing two or more active components are classified as combination products in accordance with the principles of the ATC system. In general, the main therapeutic use decides which ATCvet code is to be used.

Combination products are classified according to two main principles:

1. A commonly used principle for combination products containing two or more active components *not* belonging to the same therapeutic 4th level group are classified using 50-series codes.

Example:

QJ01AA06 *oxytetracycline* (plain)

QJ01AA56 *oxytetracycline, combinations*

Combination products with the same main active ingredient are usually given the same ATCvet code. Thus oxytetracycline + flunixin and oxytetracycline + neomycin are both assigned the code QJ01AA56.

The names of all active ingredients of a combination are given in some ATCvet 5t<sup>h</sup> levels. This principle has been used more frequently in recent years in order to give a better identification of the various combinations.

Packages comprising two or more different medicinal products marketed under a common brand name are also considered as combination products.

E.g.: Sotalol tablets and aspirin tablets in one combination package is classified in QC07FX02 *sotalol and acetylsalicylic acid*.

2. Combination products containing two or more active ingredients belonging to the same therapeutic 4th level group are classified using the 5th level codes 20 or 30.

Example:

QJ01CA *Penicillins with extended spectrum*

QJ01CA02 *pivampicillin*

QJ01CA08 *pivmecillinam*

QJ01CA20 *combinations*

For example, pivampicillin and pivmecillinam, and any other combinations including two or more active ingredients belonging to QJ01CA - *Penicillins with extended spectrum*, are given the ATCvet code QJ01CA20.

Combinations of substances used exclusively in veterinary medicine have been given the 5th level code 99.

Separate ATCvet 3rd or 4th level codes have been assigned to certain important combinations, e.g. QJ51R - *Combinations of antibacterials for intramammary use*.

The main therapeutic use decides which ATCvet code is to be used. A product containing vitamins and iron used primarily as an iron product should be classified in QB03 - *Antianemic preparations*. Likewise, a product containing vitamins and antibiotics should be assigned to QJ - *Antiinfectives for systemic use*.

The sequence of classification codes of combination products should as far as possible agree with the order of classification of the single substances in question. In some ATCvet groups a ranking is needed in order to classify combination products (e.g. in QN02B, QJ01RA and QJ51R). This ranking is described in the Guidelines and shows which substances take precedence over others when the classification is decided.

### **3. Procedures and data requirements for ATCvet classifications and alterations**

#### ***3.1 Classification of new substances and data requirements***

Requests for classifications of new substances should be addressed to the WHO Collaborating Centre for Drug Statistics Methodology. It is recommended that requests are made using the special application form available from our website at [www.whocc.no](http://www.whocc.no).

A new medicinal substance is normally not included in the ATCvet system before an application for marketing authorisations is submitted in at least one country. In some cases, it may be necessary to await a classification until the new substance has been approved in at

least one country (especially for substances where it is considered difficult to establish a new 5th level). These conditions are set to avoid including too many substances which never become marketed in the ATCvet system. Cell/gene therapy products with an approved official name (e.g. INN) may be included when having obtained a positive opinion (EU) or approval in one or more countries.

***Data requirements:***

The following data should be submitted when requesting an ATCvet code for a substance:

- Chemical structure and relationship to similar drugs.
- Pharmacology and mechanism of action, including relationship to similar drugs.
- Main indication.
- Other indications.
- Proposed ATCvet classification, with justification based on the evidence submitted.

***3.2 Principles regarding alterations to the ATCvet system***

As the range of preparations available is continually expanding, regular revisions of the ATCvet system will always be necessary.

Changes to currently valid codes should be kept to a minimum. A gap in the sequence is preferable to changing existing codes. Before alterations are made, the difficulties they may cause for users of the ATCvet system should be considered and weighed against the possible benefits.

Specific ATCvet codes will be changed if new relevant ATC codes are established. ATCvet codes should be identical to the corresponding ATC codes whenever possible, the only difference being the additional Q at level 1.

- Revisions of human ATC codes are normally incorporated in ATCvet.
- Old ATCvet codes for deleted products will not be used for any new substances.
- When a group is changed, consideration should be given to whether certain substances or parts of other groups (e.g. from group QV) could be included in the new group.

The Guidelines on ATCvet classification are updated in accordance with changes made to the ATC system.

***Procedure for alterations***

Requests for ATCvet classification of a medicinal substance should be addressed to the WHO Collaborating Centre for Drug Statistics Methodology. The application form for assignment of new ATCvet codes is available on our website ([https://www.whocc.no/atcvet/application\\_form/](https://www.whocc.no/atcvet/application_form/)). Applications on this form or by E-mail to the Centre are preferred.

All proposed changes will be scrutinized by experts and discussed by the ATCvet Working Group before a decision is made.

### **3.3 Reporting**

The WHO Collaborating Centre is responsible for reporting all alterations to the ATCvet classification system to users of the system. Subscriptions to ATCvet alterations can be arranged free of charge with the WHO Collaborating Centre. ATCvet alterations are also available from the WHO Collaborating Centres website at [www.whocc.no](http://www.whocc.no).

All requests for new ATCvet codes, comments on existing ATCvet classifications and suggestions for alterations should be addressed to the WHO Collaborating Centre. The reasons for any proposed reclassification should also be given, preferably on the special application form which can be downloaded from the WHO Collaborating Centres website.

## **4. ATCvet Index**

The WHO Collaborating Centre for Drug Statistics Methodology publishes a new issue of the complete ATCvet Index annually. The complete ATCvet Index consists of one list sorted according to ATCvet codes, listing all the ATCvet codes established, and one list alphabetically sorted according to nonproprietary drug names, including all ATCvet 5<sup>th</sup> levels. The searchable Index is freely available on the website [www.whocc.no](http://www.whocc.no) or can be ordered as hard copy or as an electronic file from the WHO Collaborating Centre. The *Guidelines for ATCvet classification* are also available at the WHO Collaborating Centres website as a pdf file.

The ATCvet system has been developed in association with the ATC system for human medicine, which is developed and maintained by the WHO Collaborating Centre for Drug Statistics Methodology in Oslo. The ATCvet system is based on the same main principles as the human ATC system, and the naming of levels is adapted from this system. Alterations and new codes in the ATC system are normally implemented also in the ATCvet system.

In general, the names of the levels are kept consistent with the human ATC system and all substances included in this system are listed. In some cases the level names in the human ATC system are not appropriate in veterinary medicine. As a consequence one change of ATCvet level name was implemented in the 2006 edition: QD05 is now named “*Drugs for keratoseborrheic disorders (human ATC: Antipsoriatics)*”.

Applications for ATCvet codes for new drugs not yet classified are received by the WHO Collaborating Centre for Drug Statistics Methodology continuously during the year. These applications are given ATCvet codes and the classifications are discussed by the ATCvet Working Group at the annual meeting in November. When the final decision has been taken, the new codes are included in the *ATCvet Index*.

Lists of the annual ATCvet alterations are distributed in January each year free of charge to the users of the ATCvet system according to a mailing list, together with an order form for the new Index.

**QA ALIMENTARY TRACT AND METABOLISM**

**QA01 STOMATOLOGICAL PREPARATIONS**

A *Stomatological preparations*

**QA02 DRUGS FOR ACID RELATED DISORDERS**

A *Antacids*

B *Drugs for peptic ulcer and gastro-oesophageal reflux disease (GORD)*

X *Other drugs for acid related disorders*

**QA03 DRUGS FOR FUNCTIONAL GASTROINTESTINAL DISORDERS**

A *Drugs for functional gastrointestinal disorders*

B *Belladonna and derivatives, plain*

C *Antispasmodics in combination with psycholeptics*

D *Antispasmodics in combination with analgesics*

E *Antispasmodics and anticholinergics in combination with other drugs*

F *Propulsives*

**QA04 ANTIEMETICS AND ANTINAUSEANTS**

A *Antiemetics and antinauseants*

**QA05 BILE AND LIVER THERAPY**

A *Bile therapy*

B *Liver therapy, lipotropics*

C *Drugs for bile therapy and lipotropics in combination*

**QA06 DRUGS FOR CONSTIPATION**

A *Drugs for constipation*

**QA07 ANTIDIARRHEALS, INTESTINAL ANTIINFLAMMATORY/ ANTIINFECTIVE AGENTS**

A *Intestinal antiinfectives*

B *Intestinal adsorbents*

C *Electrolytes with carbohydrates*

D *Antipropulsives*

E *Intestinal antiinflammatory agents*

F *Antidiarrheal microorganisms*

X *Other antidiarrheals*

**QA08 ANTIOBESITY PREPARATIONS, EXCL. DIET PRODUCTS**

A *Antiobesity preparations, excl. diet products*

**QA09 DIGESTIVES, INCL. ENZYMES**

A *Digestives, incl. enzymes*

**QA10 DRUGS USED IN DIABETES**

- A *Insulins and analogues*
- B *Blood glucose lowering drugs, excl. insulins*
- X *Other drugs used in diabetes*

**QA11 VITAMINS**

- A *Multivitamins, combinations*
- B *Multivitamins, plain*
- C *Vitamin A and D, incl. combinations of the two*
- D *Vitamin B<sub>1</sub>, plain and in combination with vitamin B<sub>6</sub> and B<sub>12</sub>*
- E *Vitamin B-complex, incl. combinations*
- G *Ascorbic acid (vitamin C), incl. combinations*
- H *Other plain vitamin preparations*
- J *Other vitamin products, combinations*

**QA12 MINERAL SUPPLEMENTS**

- A *Calcium*
- B *Potassium*
- C *Other mineral supplements*

**QA13 TONICS**

- A *Tonics*

**QA14 ANABOLIC AGENTS FOR SYSTEMIC USE**

- A *Anabolic steroids*
- B *Other anabolic agents*

**QA15 APPETITE STIMULANTS**

**QA16 OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS**

- A *Other alimentary tract and metabolism products*
- Q *Other alimentary tract and metabolism products for veterinary use*

## QA ALIMENTARY TRACT AND METABOLISM

This group comprises preparations used for the treatment of diseases affecting the alimentary tract or metabolism, e.g. antacids and antiemetics. It also includes e.g. antispasmodic and anticholinergic agents, vitamins and drugs used in diabetes.

### QA01 STOMATOLOGICAL PREPARATIONS

#### QA01A STOMATOLOGICAL PREPARATIONS

Agents for the treatment of conditions of the mouth and teeth should be classified in this group, as should preparations mainly used in gingivitis, stomatitis etc.

See also:

QN01B - *Nervous system; Anesthetics, local*

QR02AD - *Throat preparations; Anesthetics, local*

#### QA01AA *Caries prophylactic agents*

All types of fluoride preparations should be classified in this group.

#### QA01AB *Antiinfectives and antiseptics for local oral treatment*

All antiinfective and antiseptic agents for the treatment of stomatitis, gingivitis etc. should be classified in this group. Other antibiotics for topical use, see QD - *Dermatologicals*.

#### QA01AC *Corticosteroids for local oral treatment*

Corticosteroid preparations for the treatment of gingivitis, stomatitis etc., i.e. corticosteroid preparations for use in the oral cavity, should be classified in this group. Other corticosteroids for topical use, see QD - *Dermatologicals*.

#### QA01AD *Other agents for local oral treatment*

Hemostatic agents used in dentistry should be classified in this group.

Combinations with local anesthetics for oral treatment are assigned to

QA01AD11 - *Various agents for local oral treatment*.

See also:

QN01B - *Anesthetics, local*

QB02BC - *Local hemostatics*

## QA02 DRUGS FOR ACID RELATED DISORDERS

#### QA02A ANTACIDS

Plain antacid drugs, antacids in combination with antiflatulents and antacids in combination with other drugs should be classified in this group.

See also QA03AX - *Other drugs for functional gastrointestinal disorders* and QA12 - *Mineral supplements*.

**QA02AA *Magnesium compounds***

Magnesium carbonate used for treatment of mineral deficiency is classified here.

Combinations of different magnesium compounds are classified in QA02AA10 - *combinations*.

**QA02AB *Aluminium compounds***

Combinations of different aluminium compounds are classified in QA02AB10 - *combinations*.

**QA02AC *Calcium compounds***

Combinations of different calcium compounds are classified in QA02AC10 - *combinations*.

**QA02AD *Combinations and complexes of aluminium, calcium and magnesium compounds***

Antacids containing a combination of two or more of the substances: aluminium, calcium or magnesium compounds should be classified in this group.

Ordinary salt combinations are classified at the same 5th level A02AD01 e.g. combinations of aluminium hydroxide, magnesium carbonate gel and attapulgite, while the various complexes with a layer structure are classified at separate 5th levels e.g. magaldrate and almagate.

**QA02AF *Antacids with antiflatulents***

**QA02AG *Antacids with antispasmodics***

Preparations containing a combination of antacids and antispasmodics are classified in this group if the main use is as an antacid. See also QA03 - *Drugs for functional gastrointestinal disorders*.

**QA02AH *Antacids with sodium bicarbonate***

No ATCvet 5th levels are assigned in this group.

All oral formulations containing sodium bicarbonate are classified in this group.

Parenteral formulations, see B05BB.

**QA02AX *Antacids, other combinations***

**QA02B DRUGS FOR PEPTIC ULCER AND GASTRO-OESOPHAGEAL REFLUX DISEASE (GORD)**

Peptic ulcer includes ulcers in the oesophagus, stomach or duodenum.

Combinations with H<sub>2</sub>-receptor antagonists are classified in QA02B. See also QA03 - *Drugs for functional gastrointestinal disorders*.

Combinations with NSAIDs are classified in QM01A.

**QA02BA *H<sub>2</sub>-receptor antagonists***

**QA02BB *Prostaglandins***

**QA02BC** *Proton pump inhibitors*

Potassium-competitive acid blockers e.g. vonoprazan are classified in this group.

**QA02BD** *Combinations for eradication of Helicobacter pylori*

**QA02BX** *Other drugs for peptic ulcer and gastro-oesophageal reflux disease (GORD)*

Alginic acid in combination with antacids (e.g. aluminum hydroxide, calcium carbonate) is given the code QA02BX13.

**QA02X** OTHER DRUGS FOR ACID RELATED DISORDERS

Preparations which cannot be classified in the preceding groups should be assigned to this group.

**QA03** DRUGS FOR FUNCTIONAL GASTROINTESTINAL DISORDERS

Preparations containing, for example, analgesics and antispasmodics could be classified either in this group or in QN02 - *Analgesics*. Combinations of psycholeptics and antispasmodics could be classified in QN05 - *Psycholeptics* etc. The main indication for the use of the drug, together with the relative effect of the active components, will decide the classification. In the treatment of pain caused by spasms, the spasmolytic component must be judged more important than the analgesic component. Accordingly, an analgesic/antispasmodic combination should be classified in QA03 if the main effect of the agent is its antispasmodic action.

Combined preparations are classified in:

**QA03D** - *Antispasmodics in combination with analgesics*

**QA03E** - *Antispasmodics and anticholinergics in combination with other drugs*

Antispasmodics which are used specifically in the urogenital tract are classified in QG04BD - *Drugs for urinary frequency and incontinence*.

Lubiprostone is classified in QA06AX - *Other drugs for constipation*.

Peripheral opioid receptor antagonists are classified in QA06AH.

**QA03A** DRUGS FOR FUNCTIONAL GASTROINTESTINAL DISORDERS

**QA03AA** *Synthetic anticholinergics, esters with tertiary amino group*

**QA03AB** *Synthetic anticholinergics, quaternary ammonium compounds*

**QA03AC** *Synthetic antispasmodics, amides with tertiary amines*

**QA03AD** *Papaverine and derivatives*

**QA03AE** *Serotonin receptor antagonists*

**QA03AX** *Other drugs for functional gastrointestinal disorders*

Combinations of silicones and antispasmodics are classified in QA03AX13 if the main indication is flatulence.

Combinations of silicones and antacids are classified in QA02AF.

Combinations of silicones and antipropulsives are classified in QA07DA.

Trimethylphloroglucinol and combinations with trimethylphloroglucinol are allowed at the 5th level QA03AX12 - *phloroglucinol*.

Dimeticone is classified in QA03AX13 - *silicones*.

Products containing dried ruminal flora in combination with other substances, i.e. aminoacids and/or minerals etc, are classified in QA03AX at the 4th level.

QA03B BELLADONNA AND DERIVATIVES, PLAIN

**QA03BA** *Belladonna alkaloids, tertiary amines*

**QA03BB** *Belladonna alkaloids, semisynthetic, quaternary ammonium compounds*

Combinations with codeine are classified in N02AA.

QA03C ANTISPASMODICS IN COMBINATION WITH PSYCHOLEPTICS

**QA03CA** *Synthetic anticholinergic agents in combination with psycholeptics*

**QA03CB** *Belladonna and derivatives in combination with psycholeptics*

**QA03CC** *Other antispasmodics in combination with psycholeptics*

QA03D ANTISPASMODICS IN COMBINATION WITH ANALGESICS

**QA03DA** *Synthetic anticholinergic agents in combination with analgesics*

**QA03DB** *Belladonna and derivatives in combination with analgesics*

**QA03DC** *Other antispasmodics in combination with analgesics*

QA03E ANTISPASMODICS AND ANTICHOLINERGICS IN COMBINATION WITH OTHER DRUGS

**QA03EA** *Antispasmodics, psycholeptics and analgesics in combination*

**QA03ED** *Antispasmodics in combination with other drugs*

QA03F PROPULSIVES

**QA03FA** *Propulsives*

Agents stimulating gastrointestinal motility, e.g. substituted benzamides, are classified in this group.

Domperidone used for treatment of leishmaniosis is classified in QP51AX24.

**QA04** ANTIEMETICS AND ANTINAUSEANTS

QA04A ANTIEMETICS AND ANTINAUSEANTS

Antihistamines which are often used as antiemetics are classified in QR06 - *Antihistamines for systemic use*. Metoclopramide is classified in QA03FA - *Propulsives*. Cinnarizine is classified in QN07CA - *Antivertigo preparations*.

**QA04AA** *Serotonin (5HT<sub>3</sub>) antagonists*

**QA04AD** *Other antiemetics*

Fosaprepitant, a prodrug of aprepitant, is classified together with the parent drug in QA04AD12.

Droperidol injection used for prevention of nausea and vomiting in post-surgery settings is classified in QN05AD.

**QA05 BILE AND LIVER THERAPY**

QA05A BILE THERAPY

**QA05AA *Bile acids and derivatives***

Preparations classified in this group are primarily bile acid preparations, but various combinations, e.g. with spasmolytics, can also be included in each 5th level.

**QA05AB *Preparations for biliary tract therapy***

**QA05AX *Other drugs for bile therapy***

Other drugs for bile therapy which cannot be classified in the preceding groups should be assigned to this group. For example menbutone is classified in this group.

QA05B LIVER THERAPY, LIPOTROPICS

**QA05BA *Liver therapy***

QA05C DRUGS FOR BILE THERAPY AND LIPOTROPICS IN COMBINATION

**QA06 DRUGS FOR CONSTIPATION**

QA06A DRUGS FOR CONSTIPATION

All agents used for treatment of constipation (regardless of indication) are classified here.

This group is mainly subdivided according to mode of action. Enemas are classified in one group, QA06AG - *Enemas*, regardless of mode of action.

Certain combination products are classified at defined levels, these are:

QA06AB20 - *contact laxatives in combination*

QA06AB30 - *contact laxatives in combination with belladonna alkaloids*

QA06AD10 - *mineral salts in combination*

Otherwise combination preparations are classified in separate 5th level groups using the corresponding 50-series codes or, if not available, using the ATCvet 5th level code 99.

**QA06AA *Softeners, emollients***

Preparations containing liquid paraffin, docusate sodium etc. are classified in this group. Ducosate potassium is classified at the same 5th level as docusate sodium. Combinations with contact laxatives are classified in QA06AB - *Contact laxatives*, except for all liquid paraffin combinations, which are assigned to QA06AA - *Softeners, emollients*.

**QA06AB Contact laxatives**

Agents which mainly inhibit the absorption of electrolytes and water through a specific pharmacological mechanism, e.g. bisacodyl and senna glycosides, should be classified in this group.

Combinations with osmotically acting laxatives are classified here.

Combinations with bulk producing laxatives are classified in  
QA06AC - *Bulk-forming laxatives*.

Combined packages comprising tablets and enemas are classified in  
QA06AG - *Enemas*.

Gas-producing rectal preparations and glycerol suppositories, see  
QA06AX - *Other drugs for constipation*.

Phenolphthalein in combination with liquid paraffin is classified in  
QA06AA - *Softeners, emollients*.

**QA06AC Bulk-forming laxatives**

Linseed and psylla seed preparations, methyl cellulose etc. are classified in this group. Lactulose is classified in QA06AD - *Osmotically active laxatives*.

**QA06AD Osmotically acting laxatives**

Various saline purgatives and e.g. lactulose, which is primarily considered an osmotically acting substance, are classified in this group. Magnesium hydroxide is classified as an antacid in QA02AA - *Magnesium compounds*.

Combinations with contact laxatives are classified in QA06AB - *Contact laxatives*.

Combinations of lactulose with liquid paraffin should be classified in QA06AD61.

Macrogol in combination with electrolytes is classified in QA06AD65.

**QA06AG Enemas**

All enemas and laxative rectal solutions are classified in this group, regardless of mode of action. Combined packages containing tablets and enemas are classified in this group.

Some 5th level codes for plain substances also include combinations, e.g.:

QA06AG10 - *docusate sodium and e.g. sorbitol or glycerol*

QA06AG11 - *sodium lauryl sulfoacetate and e.g. sodium citrate*

**QA06AH Peripheral opioid receptor antagonists****QA06AX Other drugs for constipation****QA07 ANTIDIARRHEALS, INTESTINAL ANTIINFLAMMATORY/ANTIINFECTIVE AGENTS  
QA07A INTESTINAL ANTIINFECTIVES**

Oral antiinfectives which have no systemic effect, e.g. dihydrostreptomycin, are classified in this group.

See also:

QJ - *Antiinfectives for systemic use*

QG01- *Gynecological antiinfectives and antiseptics*

QG51- *Antiinfectives and antiseptics for intrauterine use*

QP51 - *Antiprotozoals*

**QA07AA *Antibiotics***

Combinations of neomycin and sulfonamides are classified in

QA07AA51 - *neomycin, combinations*. Combinations of neomycin and sulfadiazine indicated for treatment of diarrhoea in pre-ruminant calves are also classified here.

Combination of streptomycin and sulfonamides are classified in

QA07AA54 - *streptomycin, combinations*.

Oral combination of colistin and other antiinfectives, including substances with systemic, effect are classified in QA07AA98.

Combinations of streptomycin and neomycin are classified in

QA07AA99 - *antibiotics, combinations*.

**QA07AB *Sulfonamides***

**QA07AC *Imidazole derivatives***

**QA07AX *Other intestinal antiinfectives***

**QA07B *INTESTINAL ADSORBENTS***

Combinations with intestinal antiinfectives are assigned to QA07A - *Intestinal antiinfectives*.

**QA07BA *Charcoal preparations***

Combinations with other agents are classified in QA07BA51 - *medicinal charcoal, combinations*.

**QA07BB *Bismuth preparations***

Combinations with charcoal see QA07BA51 - *medicinal charcoal, combinations*.

**QA07BC *Other intestinal adsorbents***

All other intestinal adsorbents should be classified in this group.

**QA07C *ELECTROLYTES WITH CARBOHYDRATES***

**QA07CQ *Oral rehydration formulations for veterinary use***

**QA07D *ANTIPROPULSIVES***

**QA07DA *Antipropulsives***

Agents which reduce gastrointestinal motility, e.g. diphenoxylate and loperamide, are classified in this group.

QA07DA01 - *diphenoxylate* - also includes combinations with atropine  
QA07DA02 - *opium* - also includes combinations with belladonna and/or bismuth subgallate, albumin etc.  
QA07DA52 - *morphine, combinations* includes combinations with e.g. aluminum hydroxide, belladonna alkaloids and kaolin used as antipropulsives. Morphine combinations used in the treatment of pain are classified in QN02AA51

QA07E INTESTINAL ANTIINFLAMMATORY AGENTS

**QA07EA** *Corticosteroids acting locally*

**QA07EB** *Antiallergic agents, excl. corticosteroids*

**QA07EC** *Aminosalicylic acid and similar agents*

QA07F ANTIDIARRHEAL MICROORGANISMS

**QA07FA** *Antidiarrheal microorganisms*

QA07X OTHER ANTDIARRHEALS

**QA07XA** *Other antidiarrheals*

**QA08** ANTIOBESITY PREPARATIONS, EXCL. DIET PRODUCTS

QA08A ANTIOBESITY PREPARATIONS, EXCL. DIET PRODUCTS

Low-energy diets, see QV06AA.

**QA08AA** *Centrally acting antiobesity products*

Amfetamine, which is commonly used in psychiatry, is classified in QN06B - *Psychostimulants, agents used for ADHD and nootropics*.

**QA08AB** *Peripherally acting antiobesity products*

**QA08AX** *Other antiobesity drugs*

QA09 DIGESTIVES, INCL. ENZYMES

QA09A DIGESTIVES, INCL. ENZYMES

**QA09AA** *Enzyme preparations*

Only enzymes used in digestive disorders are classified in this group.

Cholagogues are classified in QA05 - *Bile and liver therapy*.

See also:

QA16AB - Other alimentary tract and metabolism products; Enzymes

QB06AA - Other hematological agents; Enzymes

QD03BA - Proteolytic enzymes

**QA09AB** *Acid preparations*

**QA09AC** *Enzyme and acid preparations, combinations*

**QA10 DRUGS USED IN DIABETES**  
**QA10A INSULINS AND ANALOGUES**

Insulin preparations are assigned to four different 4th level groups, according to onset and duration of action in humans, in the ATC system.

Preparations consisting of beef and pork insulin, for example, are classified as combinations (30-codes) in each 4th level group according to onset and duration of their action.

**QA10AB** *Insulins and analogues for injection, fast-acting*

**QA10AC** *Insulins and analogues for injection, intermediate-acting*

**A10AD** *Insulins and analogues for injection, intermediate- or long-acting combined with fast-acting*

**QA10AE** *Insulins and analogues for injection long-acting*

**QA10AF** *Insulins and analogues for inhalation*

**QA10B** BLOOD GLUCOSE LOWERING DRUGS, EXCL. INSULINS

**QA10BA** *Biguanides*

**QA10BB** *Sulfonylureas*

**QA10BC** *Sulfonamides (heterocyclic)*

**QA10BD** *Combinations of oral blood glucose lowering drugs*

**QA10BF** *Alpha glucosidase inhibitors*

**QA10BG** *Thiazolidinediones*

**QA10BH** *Dipeptidyl peptidase 4 (DPP-4) inhibitors*

**QA10BJ** *Glucagon-like peptide-1 (GLP-1) analogues*

**QA10BK** *Sodium-glucose co-transporter 2 (SGLT2) inhibitors*

Inhibitors of SGLT1 and SGLT2, e.g. sotagliflozin, are also classified here.

**QA10BX** *Other blood glucose lowering drugs, excl. insulins*

**QA10X** OTHER DRUGS USED IN DIABETES

**QA10XA** *Aldose reductase inhibitors*

**QA11 VITAMINS**

Vitamin preparations whose main indication is therapeutic or prophylactic use for vitamin deficiency are classified in this group.

It may be necessary to consider whether the main indication of a preparations is as a vitamin preparation, an iron preparation, or a mineral preparation, or if the preparation should be regarded as a tonic etc. In veterinary medicine there are many combination preparations containing vitamins, minerals, trace elements and other substances. In order to avoid a complicated subdivision for combined preparations, they can be classified at the 3rd level of ATCvet.

QA11A MULTIVITAMINS, COMBINATIONS

All preparations containing vitamins in combination with minerals, trace elements or iron are classified in this group.

**QA11AA** *Multivitamins with minerals*

**QA11AB** *Multivitamins, other combinations*

QA11B MULTIVITAMINS, PLAIN

Only plain multivitamin preparations are classified in this group.

**QA11BA** *Multivitamins, plain*

QA11C VITAMIN A AND D, INCL. COMBINATIONS OF THE TWO

**QA11CA** *Vitamin A, plain*

**QA11CB** *Vitamin A and D in combination*

Cod-liver oil preparations are classified in this group.

**QA11CC** *Vitamin D and analogues*

Vitamin D and analogues may be regarded as hormones, but are classified in this group. Calcium homeostasis, see QH05.

Paricalcitol and doxercalciferol indicated for the prevention and treatment of secondary hyperparathyroidism are classified in QH05BX - *Other anti-parathyroid agents*.

Oral formulations of calcifediol, solely indicated for treatment of renal secondary hyperparathyroidism are classified in QH05BX - *Other anti-parathyroid agents*, while all other pharmaceutical formulations of calcifediol are classified in QA11CC06.

QA11D VITAMIN B<sub>1</sub>, PLAIN AND IN COMBINATION WITH VITAMIN B<sub>6</sub> AND B<sub>12</sub>

**QA11DA** *Vitamin B<sub>1</sub>, plain*

**QA11DB** *Vitamin B<sub>1</sub> in combination with vitamin B<sub>6</sub> and/or vitamin B<sub>12</sub>*

Combinations with vitamin B<sub>2</sub> are also allowed in this group.

QA11E VITAMIN B-COMPLEX, INCL. COMBINATIONS

All preparations containing B-complex in combination with minerals, trace elements or iron are classified in this group.

**QA11EA** *Vitamin B-complex, plain*

**QA11EB** *Vitamin B-complex with vitamin C*

**QA11EC** *Vitamin B-complex with minerals*

**QA11ED** *Vitamin B-complex with anabolic steroids*

**QA11EX** *Vitamin B-complex, other combinations*

QA11G ASCORBIC ACID (VITAMIN C), INCL. COMBINATIONS

All preparations containing vitamin C in combination with minerals, trace elements or iron are classified in this group.

**QA11GA** *Ascorbic acid (vitamin C), plain*

**QA11GB** *Ascorbic acid (vitamin C), combinations*

QA11H OTHER PLAIN VITAMIN PREPARATIONS

See also:

QB03B - *Vitamin B<sub>12</sub> and folic acid*

QB02B - *Vitamin K and other hemostatics*

Preparations containing vitamin E in combination with selenium are classified in QA12C - *Other mineral supplements*.

**QA11HA** *Other plain vitamin preparations*

QA11J OTHER VITAMIN PRODUCTS, COMBINATIONS

All combined vitamin preparations not covered by the preceding groups are classified in this group.

Tonics are normally classified in QA13. The vitamin content of tonics should be fairly low. Some preparations that could also be considered to be tonics are classified in this group. No distinct line has been drawn between these two groups.

**QA11JA** *Combinations of vitamins*

All combinations of vitamins with no addition of other substances, not assigned to the preceding groups, should be classified in this group.

**QA11JB** *Vitamins with minerals*

**QA11JC** *Vitamins, other combinations*

Combinations containing folic acid are classified in QB03B - *Vitamin B<sub>12</sub> and folic acid*, if folic acid deficiency is the main indication.

**QA12** MINERAL SUPPLEMENTS

Mineral supplements used for the treatment of mineral deficiency should be classified in this group. Iron preparations, see QB03A - *Iron preparations*.

Oral/IV preparations containing magnesium or calcium for the treatment of hypocalcemia and milk fever are classified in this group.

QA12A CALCIUM

**QA12AA** *Calcium*

Plain calcium preparations, incl. bone extracts, for the treatment of hypocalcemia are classified in this group. Combinations of different calcium salts

are classified using the ATCvet code QA12AA20 - *calcium* (different salts in combination).

Combinations of calcium and vitamine D are classified in QA12AX.

The combination of calcium acetate and magnesium carbonate is classified in V03AE.

Antacids with calcium carbonate are classified in QA02AC.

See also:

QB05X - *IV solution additives*

**A12AX** ***Calcium, combinations with vitamin D and/or other drugs***

All combined calcium preparations used in the treatment of calcium deficiency conditions and osteoporosis should be classified in this group. Many of these are combinations with magnesium and phosphorous compounds - vitamins, especially vitamin A and D.

**QA12B** **POTASSIUM**

**QA12BA** ***Potassium***

Preparations used as potassium supplements and all combined potassium preparations used in the treatment of potassium deficiency conditions are classified in this group. Potassium citrate preparations indicated for e.g. treatment of renal tubular acidosis with calcium stones are classified here.

See also:

QC03 - *Diuretics*

QB05 - *Blood substitutes and perfusion solutions*

**QA12C** **OTHER MINERAL SUPPLEMENTS**

Other minerals, such as sodium, zinc, magnesium and fluoride should be classified in this group. See also QB05 - *Blood substitutes and perfusion solutions*.

**QA12CA** ***Sodium***

**QA12CB** ***Zinc***

**QA12CC** ***Magnesium***

Preparations containing magnesium and calcium are classified in QA12AX - *Calcium, combinations with vitamin D and/or other drugs*.

**QA12CD** ***Fluoride***

**QA12CE** ***Selenium***

Sodium selenate and vitamin E, is classified in QA12CE99 - *selenium, combinations*.

See also:

QB03AE - *Iron in other combinations*

**QA12CX Other mineral products**

Cobalt, copper and iodine, for example, should be classified in this group.

**QA13 TONICS**

**QA13A TONICS**

Preparations used as tonics etc. should be classified in this group.

**QA14 ANABOLIC AGENTS FOR SYSTEMIC USE**

**QA14A ANABOLIC STEROIDS**

Anabolic steroids are classified on the 4th level according to their chemical structure.

Anabolic steroids used exclusively in cancer therapy, see QL - *Antineoplastic and immunomodulating agents*.

**QA14AA Androstan derivatives**

**QA14AB Estren derivatives**

**QA14B OTHER ANABOLIC AGENTS**

All other anabolic agents which cannot be classified in the preceding groups should be classified here.

**QA15 APPETITE STIMULANTS**

Preparations, plain and combinations, which are only used as appetite stimulants should be classified in this group. No subdivision is made in this group. A number of drugs with other main actions may also have appetite-stimulating properties.

**QA16 OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS**

**QA16A OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS**

All preparations acting on the alimentary tract and metabolism and which cannot be classified in the preceding groups should be classified in this group, except nutrients, which are assigned to QV06 - *General nutrients*.

Glutamine for treatment of sickle cell disease is classified here.

**QA16AA Amino acids and derivatives**

Agents used in various metabolic deficiency states are classified in this group when this is considered to be their main indication.

**QA16AB Enzymes**

**QA16AX Various alimentary tract and metabolism products**

QA16Q OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS FOR VETERINARY USE

**QA16QA** *Drugs for prevention and/or treatment of acetonemia*

See also:

QH02AB - *Glucocorticoids*

**QB BLOOD AND BLOOD FORMING ORGANS**

**QB01 ANTITHROMBOTIC AGENTS**

A *Antithrombotic agents*

**QB02 ANTIHEMORRHAGICS**

A *Antifibrinolytics*  
B *Vitamin K and other hemostatics*

**QB03 ANTIANEMIC PREPARATIONS**

A *Iron preparations*  
B *Vitamin B<sub>12</sub> and folic acid*  
X *Other antianemic preparations*

**QB05 BLOOD SUBSTITUTES AND PERfusion SOLUTIONS**

A *Blood and related products*  
B *I.v. solutions*  
C *Irrigating solutions*  
D *Peritoneal dialytics*  
X *I.v. solution additives*  
Z *Hemodialytics and hemofiltrates*

**QB06 OTHER HEMATOLOGICAL AGENTS**

A *Other hematological agents*

## QB BLOOD AND BLOOD FORMING ORGANS

The group QB comprises preparations mainly affecting the blood or the blood forming organs. For example, it includes antithrombotic agents, antianemic preparations and plasma substitutes.

### QB01 ANTITHROMBOTIC AGENTS

QB01A ANTITHROMBOTIC AGENTS

#### QB01AA *Vitamin K antagonists*

Vitamin K antagonists such as dicoumarol, warfarin etc. should be classified in this group.

#### QB01AB *Heparin group*

Heparin preparations should be classified in this group, including preparations for non-therapeutic use, e.g. for rinsing of indwelling vein cannulas. The different fractions of the low molecular weight heparins should be assigned separate 5th level codes.

#### QB01AC *Platelet aggregation inhibitors, excl. heparin*

#### QB01AD *Enzymes*

#### QB01AE *Direct thrombin inhibitors*

#### QB01AF *Direct factor Xa inhibitors*

#### QB01AX *Other antithrombotic agents*

### QB02 ANTIHEMORRHAGICS

QB02A ANTIFIBRINOLYTICS

#### QB02AA *Amino acids*

#### QB02AB *Proteinase inhibitors*

QB02B VITAMIN K AND OTHER HEMOSTATICS

#### QB02BA *Vitamin K*

#### QB02BB *Fibrinogen*

#### QB02BC *Local hemostatics*

Gauze, tampons etc. impregnated with hemostatic agents should be classified in this group.

See also:

QA01AD - *Other agents for local oral treatment*

QC01CA24 - *epinephrine*

#### QB02BD *Blood coagulation factors*

#### QB02BX *Other systemic hemostatics*

Systemic hemostatics, which cannot be classified in the preceding groups, should be assigned to this group.

**QB03 ANTIANEMIC PREPARATIONS****QB03A IRON PREPARATIONS**

All plain iron preparations and all combination preparations for the treatment of iron deficiency should be classified in this group. Only plain preparations should be classified in the groups QB03AA, QB03AB and QB03AC.

Combinations with stabilizing agents (e.g. ascorbic acid) are allowed in each 5th level group. Other combinations, see QB03AD - *Iron in combination with folic acid* and QB03AE - *Iron in other combinations*. Multivitamins and iron are classified in QA11A - *Multivitamines, combinations*.

***QB03AA Iron bivalent, oral preparations******QB03AB Iron trivalent, oral preparations******QB03AC Iron, parenteral preparations******QB03AD Iron in combination with folic acid***

Iron in combination with folic acid should be classified in this group.

Preparations containing additional substances are classified in QB03AE - *Iron in other combinations*.

***QB03AE Iron in other combinations*****QB03B VITAMIN B<sub>12</sub> AND FOLIC ACID*****QB03BA Vitamin B<sub>12</sub> (cyanocobalamin and analogues)******QB03BB Folic acid and derivatives***

Folic acid for diagnostic use is classified in QV04CX *Other diagnostic agents*.

**QB03X OTHER ANTIANEMIC PREPARATIONS*****QB03XA Other antianemic preparations*****QB05 BLOOD SUBSTITUTES AND PERfusion SOLUTIONS**

See also:

QV07AB - *Solvents and diluting agents, incl. irrigating solutions*

QV07AC - *Blood transfusion, auxiliary preparations*

**QB05A BLOOD AND RELATED PRODUCTS*****QB05AA Blood substitutes and plasma protein fractions***

Polygeline is classified in QB05AA06 - *gelatin agents*.

ATCvet level QB05AA07 - *hydroxyethylstarch* includes starches that have been etherified to varying extent e.g. hepta-, hexa-, penta-, and tetrastarches.

***QB05AX Other blood products***

QB05B I.V. SOLUTIONS

I.v. solutions used in parenteral administration of fluids, electrolytes and nutrients should be classified in this group. For agents administered as i.v. solutions or additives, see the respective therapeutic groups, e.g. various antibiotics in QJ. I.v. solution additives (i.v. concentrates), see QB05X.

**QB05BA** *Solutions for parenteral nutrition*

**QB05BB** *Solutions affecting the electrolyte balance*

Electrolyte solutions, including combinations with carbohydrates for example, should be classified in this group.

**QB05BC** *Solutions producing osmotic diuresis*

QB05C IRRIGATING SOLUTIONS

Preparations used for bladder irrigation and surgical irrigation, including instruments etc., are classified in this group. Combined preparations are classified using the ATCvet 5th level code 10.

**QB05CA** *Antiinfectives*

**QB05CB** *Salt solutions*

**QB05CX** *Other irrigating solutions*

QB05D PERITONEAL DIALYTICS

QB05X I.V. SOLUTION ADDITIVES

I.v. solution additives (i.v. concentrates) are concentrated preparations containing substances used for correcting fluid and electrolyte balance and nutritional status. For drugs administered as i.v. solutions or additives, see the respective groups.

Preparations containing magnesium or calcium for the treatment of hypocalcemia or milk fever are classified in QA12AX - *Calcium, combinations with vitamin D and/or other drugs*.

**QB05XA** *Electrolyte solutions*

Plain electrolyte solutions, combinations of electrolytes, and combinations of electrolytes and other substances should be classified in this group. See also QA12 - *Mineral supplements*.

**QB05XB** *Amino acids*

**QB05XC** *Vitamins*

See also:

QA11 - *Vitamins*

**QB05XX Other i.v. solution additives**

All i.v. additives which cannot be classified in the preceding groups should be assigned to this group.

**QB05Z** HEMODIALYTICS AND HEMOFILTRATES

**QB05ZA** *Hemodialytics, concentrates*

**QB05ZB** *Hemofiltrates*

Hemofiltration solutions are classified in this group.

**QB06** OTHER HEMATOLOGICAL AGENTS

**QB06A** OTHER HEMATOLOGICAL AGENTS

This group includes preparations for local and systemic use, and also some preparations used for dissolving clots in catheters, hemodialysis clots etc.

See also:

QV07A - *All other non-therapeutic products*

QB01AB - *Heparin group*

**QB06AA** *Enzymes*

Enzymes with fibrinolytic properties should be classified in this group. Enzymes with other well-defined therapeutic uses should be classified in the relevant groups, see e.g.:

QA09A - *Digestives, incl. enzymes*

QD03BA - *Proteolytic enzymes*

**QB06AB** *Heme products*

**QB06AC** *Drugs used in hereditary angioedema*

**QB06AX** *Other hematological agents*

**QC**      **CARDIOVASCULAR SYSTEM**

**QC01**    **CARDIAC THERAPY**

- A    *Cardiac glycosides*
- B    *Antiarrhythmics, class I and III*
- C    *Cardiac stimulants excl. cardiac glycosides*
- D    *Vasodilators used in cardiac diseases*
- E    *Other cardiac preparations*

**QC02**    **ANTIHYPERTENSIVES**

- A    *Antidiuretic agents, centrally acting*
- B    *Antidiuretic agents, ganglion-blocking*
- C    *Antidiuretic agents, peripherally acting*
- D    *Arteriolar smooth muscle, agents acting on*
- K    *Other antihypertensives*
- L    *Antihypertensives and diuretics in combination*
- N    *Combinations of antihypertensives in ATCvet gr. QC02*

**QC03**    **DIURETICS**

- A    *Low-ceiling diuretics, thiazides*
- B    *Low-ceiling diuretics, excl. thiazides*
- C    *High-ceiling diuretics*
- D    *Aldosterone antagonists and other potassium-sparing agents*
- E    *Diuretics and potassium-sparing agents in combination*
- X    *Other diuretics*

**QC04**    **PERIPHERAL VASODILATORS**

- A    *Peripheral vasodilators*

**QC05**    **VASOPROTECTIVES**

- A    *Agents for treatment of hemorrhoids and anal fissures for topical use*
- B    *Antivaricose therapy*
- C    *Capillary stabilizing agents*

**QC07**    **BETA BLOCKING AGENTS**

- A    *Beta blocking agents*
- B    *Beta blocking agents and thiazides*
- C    *Beta blocking agents and other diuretics*
- D    *Beta blocking agents, thiazides and other diuretics*
- E    *Beta blocking agents and vasodilators*
- F    *Beta blocking agents and other antihypertensives*

**QC08      CALCIUM CHANNEL BLOCKERS**

- C    *Selective calcium channel blockers with mainly vascular effect*
- D    *Selective calcium channel blockers with direct cardiac effect*
- E    *Non-selective calcium channel blockers*
- G    *Calcium channel blockers and diuretics*

**QC09      AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM**

- A    *ACE inhibitors, plain*
- B    *ACE inhibitors, combinations*
- C    *Angiotensin II receptor blockers (ARBs), plain*
- D    *Angiotensin II receptor blockers (ARBs), combinations*
- X    *Other agents acting on the renin-angiotensin system*

**QC10      LIPID MODIFYING AGENTS**

- A    *Lipid modifying agents, plain*
- B    *Lipid modifying agents, combinations*

**QC CARDIOVASCULAR SYSTEM**

**QC01 CARDIAC THERAPY**

**QC01A CARDIAC GLYCOSIDES**

Plain and combined preparations containing cardiac glycosides, including standardized herbal extracts, are classified in this group.

**QC01AA *Digitalis glycosides***

Combinations with diuretics are classified here

**QC01AB *Scilla glycosides***

**QC01AC *Strophantus glycosides***

**QC01AX *Other cardiac glycosides***

**QC01B ANTIARRHYTHMICS, CLASS I AND III**

Preparations used in the treatment of arrhythmias should be classified in this group. See also QC08 - *Calcium channel blockers*.

As in the ATC system, agents are listed according to the Vaughan Williams classification of antiarrhythmics. The division of class I antiarrhythmics may vary, depending on the literature used. The 3rd ed. of Avery's *Drug Treatment* (1987) and *Drugs* 31, 93 - 95, 1986 have been used as a basis for the ATC classification.

Class II antiarrhythmics are assigned to group QC07 - *Beta blocking agents*, and class IV antiarrhythmics to QC08 - *Calcium channel blockers*.

Combined preparations are classified at separate 5th levels using the corresponding 50-series codes or, if not available, using the 5th level code 99.

**QC01BA *Antiarrhythmics, class Ia***

**QC01BB *Antiarrhythmics, class Ib***

Lidocaine used as a local anesthetic is classified in QN01BB - *Amides*. Phenytoin, a class Ib antiarrhythmic, is classified as an antiepileptic in QN03 - *Antiepileptics*.

**QC01BC *Antiarrhythmics, class Ic***

**QC01BD *Antiarrhythmics, class III***

Sotalol, which has class III antiarrhythmic properties, is classified in QC07AA - *Beta blocking agents, non-selective*.

**QC01BG *Other antiarrhythmics, class I and III***

**QC01C CARDIAC STIMULANTS EXCL. CARDIAC GLYCOSIDES**

Cardiac stimulants other than glycosides are classified in this group. Agents exerting inotropic or other cardiovascular stimulating effects for the treatment of hypotension should be classified in this group. Agents exerting both inotropic and antihypertensive effects, e.g. phosphodiesterase inhibitors, are also included in this group. Preparations containing these substances which are mainly

indicated for bronchodilatation should be classified in QR03 - *Drugs for obstructive airway diseases*. Oral products of ephedrine are classified in QR03CA.

**QC01CA Adrenergic and dopaminergic agents**

Sympathomimetic preparations containing e.g. dobutamine, norepinephrine, epinephrine or isoprenaline, mainly intended for the treatment of hypotension, should be classified in this group. Preparations used mainly as bronchodilators, e.g. epinephrine preparations are assigned to QR03 - *Drugs for obstructive airway diseases*.

**QC01CE Phosphodiesterase inhibitors**

Cardiac stimulants exerting phosphodiesterase-inhibiting activity, e.g. amrinone, should be classified in this group.

Phosphodiesterase inhibitors such as theophylline, which are used in asthma therapy, are classified in QR03D - *Other systemic drugs for obstructive airway diseases*.

**QC01CX Other cardiac stimulants**

**QC01D VASODILATORS USED IN CARDIAC DISEASES**

Preparations used in ischemic heart disease are classified in this group. See also QC02, QC03, QC04, QC07, QC08 and QC09.

Combinations with cardiac glycosides, see QC01A.

Combinations with rauwolfia alkaloids, see QC02AA.

Combinations with beta blocking agents, see QC07.

Combinations with calcium channel blockers, see QC08.

**QC01DA Organic nitrates**

Amyl nitrite is classified in QV03AB - *Antidotes*.

Combinations of isosorbide dinitrate and hydralazine are classified in QC01DA58.

**QC01DB Quinolone vasodilators**

**QC01DX Other vasodilators used in cardiac diseases**

Vasodilators used in cardiac diseases which cannot be classified in the preceding groups should be assigned to this group.

**QC01E OTHER CARDIAC PREPARATIONS**

Various preparations used in the treatment of ischemic heart disease, which cannot be classified in any of the preceding groups should be assigned to this group.

**QC01EA Prostaglandins**

**QC01EB** *Other cardiac preparations*

Plain preparations used in the treatment of ischemic heart diseases, which cannot be classified in the preceding groups should be assigned to this group.

Other cardiovascular agents which cannot be classified in ATCvet group QC02-QC09 are also classified here.

**QC01EX** *Other cardiac combination products*

Combined preparations, which cannot be classified in the preceding groups, should be assigned to this group.

**QC02** **ANTIHYPERTENSIVES**

Preparations mainly used or intended to be used to lower blood pressure should be classified in this group.

Antihypertensives are mainly classified at the 3rd level according to their mechanism of action. See also:

QC03 - *Diuretics*

QC07 - *Beta blocking agents*

QC08 - *Calcium channel blockers*

QC09 - *Agents acting on the renin-angiotensin system*

**QC02A** ANTIADRENERGIC AGENTS, CENTRALLY ACTING

**QC02AA** *Rauwolfia alkaloids*

**QC02AB** *Methyldopa*

**QC02AC** *Imidazoline receptor agonists*

**QC02B** ANTIADRENERGIC AGENTS, GANGLION-BLOCKING

**QC02BA** *Sulfonium derivatives*

**QC02BB** *Secondary and tertiary amines*

**QC02BC** *Bisquaternary ammonium compounds*

**QC02C** ANTIADRENERGIC AGENTS, PERIPHERALLY ACTING

Alpha- and beta blocking agents are classified in QC07AG.

**QC02CA** *Alpha-adrenoreceptor antagonists*

**QC02CC** *Guanidine derivatives*

**QC02D** ARTERIOLAR SMOOTH MUSCLE, AGENTS ACTING ON

See also:

QC08 - *Calcium channel blockers*

**QC02DA** *Thiazide derivatives*

**QC02DB** *Hydrazinophthalazine derivatives*

Combinations of isosorbide dinitrate and hydralazine are classified in QC01DA - *Organic nitrates*.

**QC02DC** *Pyrimidine derivatives*

**QC02DD** *Nitroferricyanide derivatives*

**QC02DG** *Guanidine derivatives*

**QC02K** OTHER ANTIHYPERTENSIVES

All antihypertensives which cannot be classified in groups

QC02A-D, QC02L, QC02N, QC03 - Diuretics, QC07 - *Beta blocking agents*, QC08 - *Calcium channel blockers* or QC09 - *Agents acting on the renin-angiotensin system*, should be assigned to this group.

**QC02KA** *Alkaloids, excl. rauwolfia*

**QC02KB** *Tyrosine hydroxylase inhibitors*

**QC02KC** *MAO inhibitors*

**QC02KD** *Serotonin antagonists*

**QC02KX** *Antihypertensives for pulmonary arterial hypertension*

**QC02L** ANTIHYPERTENSIVES AND DIURETICS IN COMBINATION

**QC02LA** *Rauwolfia alkaloids and diuretics in combination*

**QC02LB** *Methyldopa and diuretics in combination*

**QC02LC** *Imidazoline receptor agonists in combination with diuretics*

**QC02LE** *Alpha-adrenoreceptor antagonists and diuretics*

**QC02LF** *Guanidine derivatives and diuretics*

**QC02LG** *Hydrazinophthalazine derivatives and diuretics*

**QC02LL** *MAO inhibitors and diuretics*

**QC02LN** *Serotonin antagonists and diuretics*

**QC02LX** *Other antihypertensives and diuretics*

**QC02N** COMBINATIONS OF ANTIHYPERTENSIVES IN ATCvet gr. QC02

**QC03** DIURETICS

Diuretics, plain and in combination with potassium or other agents, are classified in this group. Vasopressin antagonists are also included in this group.

Potassium-sparing agents are classified in QC03D and QC03E. See also QB05BC - *Solutions producing osmotic diuresis*.

Combinations with digitalis glycosides, see QC01AA.

QC03A	LOW-CEILING DIURETICS, THIAZIDES
	Combination with potassium-sparing agents, see QC03EA.
<b>QC03AA</b>	<b><i>Thiazides, plain</i></b>
<b>QC03AB</b>	<b><i>Thiazides and potassium in combination</i></b>
	The 5th levels correspond to those in QC03AA:
	QC03AA01 - <i>bendroflumethiazide</i>
	QC03AB01 - <i>bendroflumethiazide and potassium</i>
<b>QC03AH</b>	<b><i>Thiazides, combinations with psycholeptics and/or analgesics</i></b>
<b>QC03AX</b>	<b><i>Thiazides, combinations with other drugs</i></b>
QC03B	LOW-CEILING DIURETICS, EXCL. THIAZIDES
	All low-ceiling diuretics not classified in QC03A should be classified in this group.
	Combinations with potassium-sparing agents, see QC03EA.
<b>QC03BA</b>	<b><i>Sulfonamides, plain</i></b>
<b>QC03BB</b>	<b><i>Sulfonamides and potassium in combination</i></b>
	The 5th levels correspond to those in QC03BA - <i>Sulfonamides, plain</i> , see example in QC03AB.
<b>QC03BC</b>	<b><i>Mercurial diuretics</i></b>
<b>QC03BD</b>	<b><i>Xanthine derivatives</i></b>
	Includes e.g. theobromine. See also QR03DA - <i>Xanthines</i> .
<b>QC03BK</b>	<b><i>Sulfonamides, combinations with other drugs</i></b>
<b>QC03BX</b>	<b><i>Other low-ceiling diuretics</i></b>
	All low-ceiling diuretics which cannot be classified in the preceding groups should be assigned to this group.
C03C	HIGH-CEILING DIURETICS
	High-ceiling diuretics (loop-diuretics), e.g. furosemide, should be classified in this group.
	Combinations with potassium-sparing agents, see QC03EB.
<b>QC03CA</b>	<b><i>Sulfonamides, plain</i></b>
<b>QC03CB</b>	<b><i>Sulfonamides and potassium in combination</i></b>
	The 5th levels correspond to those in QC03CA - <i>Sulfonamides, plain</i> . See example in QC03AB.
<b>QC03CC</b>	<b><i>Aryloxyacetic acid derivatives</i></b>
<b>QC03CD</b>	<b><i>Pyrazolone derivatives</i></b>

**QC03CX Other high-ceiling diuretics**

All high-ceiling diuretics, which cannot be classified in the preceding groups, should be assigned to this group.

**QC03D ALDOSTERONE ANTAGONISTS AND OTHER POTASSIUM-SPARING AGENTS**

***QC03DA Aldosterone antagonists***

***QC03DB Other potassium-sparing agents***

**QC03E DIURETICS AND POTASSIUM-SPARING AGENTS IN COMBINATION**

***QC03EA Low-ceiling diuretics and potassium-sparing agents***

***QC03EB High-ceiling diuretics and potassium-sparing agents***

**QC03X OTHER DIURETICS**

***QC03XA Vasopressin antagonists***

**QC04 PERIPHERAL VASODILATORS**

**QC04A PERIPHERAL VASODILATORS**

Plain and combined preparations used in the treatment of cerebrovascular or peripheral circulatory disorders should be classified in this group.

Combinations with antihypertensives, see QC02 - *Antihypertensives*.

Combinations with vasodilators used in cardiac diseases, see QC01DA.

***QC04AA 2-amino-1-phenylethanol derivatives***

***QC04AB Imidazoline derivatives***

***QC04AC Nicotinic acid and derivatives***

***QC04AD Purine derivatives***

Propentofylline for veterinary use is classified in this group.

***QC04AE Ergot alkaloids***

***QC04AF Enzymes***

***QC04AX Other peripheral vasodilators***

Papaverine products, see QA03AD - *Papaverine and derivatives*.

**QC05 VASOPROTECTIVES**

Agents for antihemorrhoidal, antivaricose or capillary stabilizing use.

**QC05A AGENTS FOR TREATMENT OF HEMORRHOIDS AND ANAL FISSURES FOR TOPICAL USE**

***QC05AA Corticosteroids***

***QC05AB Antibiotics***

**QC05AD** *Local anesthetics*

**QC05AE** *Muscle relaxants*

Topical products containing glyceryl trinitrate or isosorbide dinitrate are classified in this group.

**QC05AX** *Other agents for treatment of hemorrhoids and anal fissures for topical use*

QC05B ANTIVARICOSE THERAPY

**QC05BA** *Heparins or heparinoids for topical use*

**QC05BB** *Sclerosing agents for local injection*

**QC05BX** *Other sclerosing agents*

QC05C CAPILLARY STABILIZING AGENTS

**QC05CA** *Bioflavonoids*

**QC05CX** *Other capillary stabilizing agents*

**QC07** **BETA BLOCKING AGENTS**

Agents blocking the beta receptors or with combined alpha- and beta blocking effect should be assigned to this group.

Combinations of beta blocking agents and other active ingredients are classified in the following groups:

QC07A - *Beta blocking agents*

QC07B - *Beta blocking agents and thiazides*

QC07C - *Beta blocking agents and other diuretics*

QC07D - *Beta blocking agents, thiazides and other diuretics*

QC07E - *Beta blocking agents and vasodilators*

QC07F - *Beta blocking agents and other antihypertensives*

QC07A BETA BLOCKING AGENTS

All plain beta blocking agents are classified in this group.

Combination packages containing two different products (e.g. sotalol tablets and aspirin tablets in a combination package) are also classified in this group.

Labetalol, and carvedilol are classified in QC07AG - *Alpha- and beta blocking agents*.

Beta blocking agents in combination with ACE inhibitors are classified in QC09BX - *ACE inhibitors, other combinations*.

Beta blocking agents in combination with angiotensin II antagonists are classified in QC09DX - *Angiotensin II receptor blockers (ARBs), other combinations*.

**QC07AA** *Beta blocking agents, non-selective*

Non-selective beta blocking agents, e.g. carazolol, are classified in this group.

Combined packages containing sotalol tablets and aspirin tablets are classified in QC07AA57.

**QC07AB** *Beta blocking agents, selective*

Selective beta blocking agents are classified in this group. The S-enantiomer and the racemate of atenolol are assigned separate 5th level codes. Preparations containing beta blocking agents should be classified according to their main indication, e.g. clenbuterol, see QR03AC14 or QR03CC13.

**QC07AG** *Alpha- and beta blocking agents*

QC07B BETA BLOCKING AGENTS AND THIAZIDES

**QC07BA** *Beta blocking agents, non-selective, and thiazides*

**QC07BB** *Beta blocking agents, selective, and thiazides*

**QC07BG** *Alpha and beta blocking agents and thiazides*

QC07C BETA BLOCKING AGENTS AND OTHER DIURETICS

**QC07CA** *Beta blocking agents, non-selective, and other diuretics*

**QC07CB** *Beta blocking agents, selective, and other diuretics*

**QC07CG** *Alpha and beta blocking agents and other diuretics*

QC07D BETA BLOCKING AGENTS, THIAZIDES AND OTHER DIURETICS

**QC07DA** *Beta blocking agents, non-selective, thiazides and other diuretics*

**QC07DB** *Beta blocking agents, selective, thiazides and other diuretics*

QC07E BETA BLOCKING AGENTS AND VASODILATORS

**QC07EA** *Beta blocking agents, non-selective, and vasodilators*

**QC07EB** *Beta blocking agents, selective, and vasodilators*

QC07F BETA BLOCKING AGENTS AND OTHER ANTIHYPERTENSIVES

**QC07FB** *Beta blocking agents and calcium channel blockers*

**QC07FX** *Beta blocking agents, other combinations*

**QC08** **CALCIUM CHANNEL BLOCKERS**

QC08C SELECTIVE CALCIUM CHANNEL BLOCKERS WITH MAINLY VASCULAR EFFECTS

**QC08CA** *Dihydropyridine derivates*

**QC08CX** *Other selective calcium channel blockers with mainly vascular effects*

QC08D SELECTIVE CALCIUM CHANNEL BLOCKERS WITH DIRECT CARDIAC EFFECTS

**QC08DA** *Phenylalkylamine derivatives*

**QC08DB** *Benzothiazepine derivates*

QC08E	NON-SELECTIVE CALCIUM CHANNEL BLOCKERS
	Phenylalkylamine derivatives, see QC08EX - <i>Other non-selective calcium channel blockers</i> .
<b>QC08EA</b>	<b><i>Phenylalkylamine derivatives</i></b>
<b>QC08EX</b>	<b><i>Other non-selective calcium channel blockers</i></b>
QC08G	CALCIUM CHANNEL BLOCKERS AND DIURETICS
<b>QC08GA</b>	<b><i>Calcium channel blockers and diuretics</i></b>
<b>QC09</b>	<b>AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM</b>
QC09A	ACE INHIBITORS, PLAIN
	All plain ACE inhibitors are classified in this group. No separate ATC codes are assigned for the active metabolites of the ACE inhibitors (e.g. enalaprilat, quinaprilat).
	Combinations with diuretics, see QC09BA - <i>ACE inhibitors and diuretics</i> .
	Combinations with calcium channel blockers, see QC09BB - <i>ACE inhibitors and calcium channel blockers</i> .
	Beta blocking agents in combination with ACE inhibitors are classified in QC09BX - <i>ACE inhibitors, other combinations</i> .
<b>QC09AA</b>	<b><i>ACE inhibitors, plain</i></b>
QC09B	ACE INHIBITORS, COMBINATIONS
	Combinations of ACE inhibitors, statins and acetylsalicylic acid are classified in QC10BX.
<b>QC09BA</b>	<b><i>ACE inhibitors and diuretics</i></b>
<b>QC09BB</b>	<b><i>ACE inhibitors and calcium channel blockers</i></b>
	Combinations with statins are classified in QC10BX.
<b>QC09BX</b>	<b><i>ACE inhibitors, other combinations</i></b>
	Combination with beta blocking agents are classified in this group.
QC09C	ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), PLAIN
<b>QC09CA</b>	<b><i>Angiotensin II receptor blockers (ARBs), plain</i></b>
QC09D	ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), COMBINATIONS
	Combinations with statins are classified in QC10BX.
<b>QC09DA</b>	<b><i>Angiotensin II receptor blockers (ARBs) and diuretics</i></b>
<b>QC09DB</b>	<b><i>Angiotensin II receptor blockers (ARBs) and calcium channel blockers</i></b>

**QC09DX Angiotensin II receptor blockers (ARBs), other combinations**

QC09X OTHER AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM  
**QC09XA Renin-inhibitors**

Fixed combinations of aliskiren and valsartan are classified in QC09DX.

**QC10 LIPID MODIFYING AGENTS**

Agents for the treatment of hyperlipidemia (or hyperlipoproteinemia) are classified in this group.

QC10A LIPID MODIFYING AGENTS, PLAIN

**QC10AA HMG CoA reductase inhibitors**

**QC10AB Fibrates**

**QC10AC Bile acid sequestrants**

**QC10AD Nicotinic acid and derivatives**

Combinations of nicotinic acid and laropiprant are classified in QC10AD52.

**QC10AX Other lipid modifying agents**

Icosapent ethyl is classified in QC10AX06 - omega-3-triglycerides incl. other esters and acids.

QC10B LIPID MODIFYING AGENTS, COMBINATIONS

**QC10BA Combinations of various lipid modifying agents**

**QC10BX Lipid modifying agents in combination with other drugs**

This group comprises products which contain lipid modifying agents (including combinations of various lipid modifying agents) in combination with other substances.

Combinations with e.g. ACE inhibitors, angiotensin II antagonists, calcium channel blockers or diuretics are classified in this group.

## **QD DERMATOLOGICALS**

### **QD01 ANTIFUNGALS FOR DERMATOLOGICAL USE**

- A *Antifungals for topical use*
- B *Antifungals for systemic use*

### **QD02 EMOLLIENTS AND PROTECTIVES**

- A *Emollients and protectives*
- B *Protectives against UV-radiation*

### **QD03 PREPARATIONS FOR TREATMENT OF WOUNDS AND ULCERS**

- A *Cicatrizants*
- B *Enzymes*

### **QD04 ANTIPRURITICS, INCL. ANTIHISTAMINES, ANESTHETICS ETC.**

- A *Antipruritics, incl. antihistamines, anesthetics etc.*

### **QD05 DRUGS FOR KERATOSEBORRHEIC DISORDERS, TOPICAL USE (ATC HUMAN: ANTIPSORIATICS)**

- A *Drugs for keratoseborrheic disorders, topical (ATC human: Antipsoriatics for topical use)*
- B *Antipsoriatics for systemic use (ATC human: Antipsoriatics for systemic use)*

### **QD06 ANTIBIOTICS AND CHEMOTHERAPEUTICS FOR DERMATOLOGICAL USE**

- A *Antibiotics for topical use*
- B *Chemotherapeutics for topical use*
- C *Antibiotics and chemotherapeutics, combinations*

### **QD07 CORTICOSTEROIDS, DERMATOLOGICAL PREPARATIONS**

- A *Corticosteroids, plain*
- B *Corticosteroids, combinations with antiseptics*
- C *Corticosteroids, combinations with antibiotics*
- X *Corticosteroids, other combinations*

### **QD08 ANTISEPTICS AND DISINFECTANTS**

- A *Antiseptics and disinfectants*

### **QD09 MEDICATED DRESSINGS**

- A *Medicated dressings*

**QD10      ANTI-ACNE PREPARATIONS**

- A      *Anti-acne preparations for topical use*
- B      *Anti-acne preparations for systemic use*

**QD11      OTHER DERMATOLOGICAL PREPARATIONS**

- A      *Other dermatological preparations*

**QD51      PRODUCTS FOR THE TREATMENT OF CLAWS AND HOOFS**

## **QD DERMATOLOGICALS**

This main group comprises dermatological preparations. Most of these preparations are intended for topical use, e.g. antifungals, antibiotics, corticosteroids and antiseptics for topical use.

Some dermatological preparations intended for systemic use, e.g. griseofulvin (antimycotic), are also classified in this group.

### **QD01 ANTIFUNGALS FOR DERMATOLOGICAL USE**

Preparations for topical and systemic treatment of dermatological mycoses should be classified in this group. Preparations with a systemic antimycotic effect, see also QJ02A - *Antimycotics for systemic use*.

Preparations for local treatment of fungal infections in the mouth, see QA01AB - *Antiinfectives and antiseptics for local oral treatment*.

#### **QD01A ANTIFUNGALS FOR TOPICAL USE**

Combined preparations are assigned in this group if mycosis is regarded the main indication.

##### ***QD01AA Antibiotics***

Preparations used in the treatment of bacterial dermatological infections, see QD06A - *Antibiotics for topical use*.

##### ***QD01AC Imidazole and triazole derivatives***

Shampoos containing imidazoles are classified in this group.

Combinations with corticosteroids are classified in QD01AC20. All other combinations are classified by using the 50-series e.g. miconazole and zinc.

Combinations of imidazole and triazole derivatives, gentamicin and corticosteroids are classified in QD07C - *Corticosteroids, combinations with antibiotics*

##### ***QD01AE Other antifungals for topical use***

Combined preparations containing salicylic acid used as antifungals (e.g. dusting powders) are classified in this group using the 5th level code QD01AE20 - *other fungals for topical use*. See also QD02AF - *Salicylic acid preparations for topical use*, and QD08AH - *Quinolone derivatives* (chlorquininaldol, clioquinol etc.).

#### **QD01B ANTIFUNGALS FOR SYSTEMIC USE**

Preparations used in the systemic treatment of dermatological mycoses. See also QJ02A - *Antimycotics for systemic use*.

##### ***QD01BA Antifungals for systemic use***

<b>QD02</b>	<b>EMOLLIENTS AND PROTECTIVES</b>
QD02A	<b>EMOLLIENTS AND PROTECTIVES</b>
	All types of emollients and protectives with no specific therapeutic effect or use, and also preparations for use in wounds which are not classified in
	QD09 - <i>Medicated dressings</i> , should be assigned to this group. Some similar preparations are classified in QD03A - <i>Cicatrizants</i> , e.g. cod-liver oil ointments.
<b>QD02AA</b>	<b><i>Silicone products</i></b>
<b>QD02AB</b>	<b><i>Zinc products</i></b>
<b>QD02AC</b>	<b><i>Soft paraffin and fat products</i></b>
	Some similar preparations with a higher water content (creams) are classified in QD02AX - <i>Other emollients and protectives</i> . Soft paraffin dressings, see QD09AX.
<b>QD02AD</b>	<b><i>Liquid plasters</i></b>
	Liquid plasters are classified in this group whereas non-medicated adhesive plasters, surgical tapes etc. are classified in QV07AA.
<b>QD02AE</b>	<b><i>Carbamide products</i></b>
<b>QD02AF</b>	<b><i>Salicylic acid preparations</i></b>
	Products containing salicylic acid used for the treatment of mycosis are classified in QD01AE - <i>Other antifungals for topical use</i> .
	Salicylic acid in combination with corticosteroids, see QD07X.
	Topical products for joint and muscular pain containing combinations with salicylic acid are classified in QM02AC.
<b>QD02AX</b>	<b><i>Other emollients and protectives</i></b>
	Soft paraffin and fat products with a high water content (creams) are classified in this group. See also QD02AC - <i>Soft paraffin and fat products</i> .
<b>QD02B</b>	<b>PROTECTIVES AGAINST UV-RADIATION</b>
<b>QD02BA</b>	<b><i>Protectives against UV-radiation for topical use</i></b>
<b>QD02BB</b>	<b><i>Protectives against UV-radiation for systemic use</i></b>
<b>QD03</b>	<b>PREPARATIONS FOR TREATMENT OF WOUNDS AND ULCERS</b>
	Topical preparations used in the treatment of wounds and ulcers are classified in this group. When preparations in this group are to be classified, alternative groups should be considered, e.g.:
QD02A	- <i>Emollients and protectives</i>
QD06	- <i>Antibiotics and chemotherapeutics for dermatological use</i> .
QD08	- <i>Antiseptics and disinfectants</i>
QD09	- <i>Medicated dressings</i>

QD03A CICATRIZANTS

Topical vitamin preparations etc. are assigned to this group if they cannot be classified in other groups.

**QD03AA Cod-liver oil ointments**

Includes cod-liver (vitamin A) ointments in combination with chlorhexidine.

**QD03AX Other cicatrizers**

Includes e.g. dextranomer powders with or without antiseptics. See also QD08AG - *Iodine products* and QD09 - *Medicated dressings*.

Topical products containing glyceryl trinitrate or isosorbide dinitrate used for treatment of anal fissures are classified in QC05AE.

QD03B ENZYMES

Proteolytic enzymes for topical treatment of ulcers are classified in this group.

**QD03BA Proteolytic enzymes**

**QD04 ANTIPRURITICS, INCL. ANTIHISTAMINES, ANESTHETICS ETC.**

**QD04A ANTIPRURITICS, INCL. ANTIHISTAMINES, ANESTHETICS ETC.**

Antipruritics, anesthetics etc. for topical use in the treatment of pruritus, minor burns and insect stings are classified in this group.

See also:

QD06B - *Chemotherapeutics for topical use*

QD07 - *Corticosteroids, dermatological preparations*

**QD04AA Antihistamines for topical use**

In each 5th level, antiseptics, siccants etc. may occur in combination with the antihistamines. Combinations with corticosteroids, see QD07 - *Corticosteroids, dermatological preparations*. See also QC05A - *Agents for treatment of hemorrhoids and anal fissures for topical use* and QN01B - *Anesthetics, local*.

**QD04AB Anesthetics for topical use**

In each 5th level, antiseptics, siccants etc. may occur in combination with the anesthetics. Combinations with corticosteroids, see QD07 - *Corticosteroids, dermatological preparations*. See also QC05A - *Agents for treatment of hemorrhoids and anal fissures for topical use* and QN01B - *Anesthetics, local*.

**QD04AX Other antipruritics**

Ointments, creams, liniments etc. containing e.g. camphor, menthol and calamine are classified in this group. When preparations in this group are to be classified, alternative groups should be considered, e.g.:

QD02 - *Emollients and protectives*

QD08 - *Antiseptics and disinfectants*

QM02 - *Topical products for joint and muscular pain*

Nalfurafine and difelikefalin indicated for pruritus in chronic kidney disease are classified in QV03AX - *Other therapeutic products*.

**QD05 DRUGS FOR KERATOSEBORRHEIC DISORDERS (ATC HUMAN: ANTIPSORIATICS)**  
**QD05A DRUGS FOR KERATOSEBORRHEIC DISORDERS, TOPICAL USE (ATC HUMAN: ANTIPSORIATICS FOR TOPICAL USE)**

All corticosteroids for topical use are classified in QD07 - *Corticosteroids, dermatological preparations*.

**QD05AA Tars**

All tar preparations for dermatological use are classified in this group, except for combinations with corticosteroids.

**QD05AC Antracen derivatives**

**QD05AD Psoralens for topical use**

**QD05AX Drugs for keratoseborrheic disorders (ATC human: Other antipsoriasis for topical use)**

**QD05B DRUGS FOR KERATOSEBORRHEIC DISORDERS, SYSTEMIC USE (ATC HUMAN: ANTIPSORIATICS FOR SYSTEMIC USE)**

**QD05BA Psoralens for systemic use**

**QD05BB Retinoids for treatment of psoriasis**

**QD05BX Other drugs for keratoseborrheic disorders for systemic use**

**QD06 ANTIBIOTICS AND CHEMOTHERAPEUTICS FOR DERMATOLOGICAL USE**

Preparations for topical treatment of skin infections etc. are classified in this group.

*Antimicrobial* chemotherapeutics are classified here, while *antineoplastic* chemotherapeutics are classified in QL01.

**QD06A ANTIBIOTICS FOR TOPICAL USE**

See also:

**QD01A- Antifungals for topical use**

**QD06C- Antibiotics and chemotherapeutics, combinations**

**QD07C- Corticosteroids, combinations with antibiotics**

**QD06AA Tetracycline and derivatives**

**QD06AX Other antibiotics for topical use**

Combined preparations which contain neomycin and other antibiotics (e.g. bacitracin) are classified in QD06AX04 - *neomycin*.

Combined preparations containing bacitracin and chlorhexidine are classified in QD06AX05 - *bacitracin*.

Topical formulations of clindamycin for veterinary use are classified in QD10AF01.

QD06B CHEMOTHERAPEUTICS FOR TOPICAL USE

This group includes antimicrobial chemotherapeutics for dermatological use, except for:

QD06C - *Antibiotics and chemotherapeutics, combinations*

QD07C - *Corticosteroids, combinations with antibiotics*

Antineoplastic chemotherapeutics are classified in QL01 - *Antineoplastic agents*.

**QD06BA Sulfonamides**

Formosulfathiazole for topical use is classified in this group.

**QD06BB Antivirals**

Podophyllin preparations are classified in the 5th level group for podophyllotoxin.

**QD06BX Other chemotherapeutics**

Chemotherapeutics used in different skin disorders which cannot be classified in the preceding groups should be assigned to this group.

Some agents used in the treatment of actinic keratosis are also classified here.

Other agents used in this indication are classified in QD06BB - *Antivirals*,

QD11AX - *Other dermatologicals*, QL01BC - *Pyrimidine analogues* and QL01XD - *Sensitizers in photo-/radiotherapy*.

QD06C ANTIBIOTICS AND CHEMOTERAPEUTICS, COMBINATIONS

**QD07 CORTICOSTEROIDS, DERMATOLOGICAL PREPARATIONS**

As a general rule, all topical corticosteroid preparations should be classified in this group. There are, however, a few exceptions: for most antifungal products with corticosteroids, the primary indication is mycosis and not inflammation, and these preparations should be classified in QD01A - *Antifungals for topical use*.

Corticosteroids, antiseptics and salicylic acid in combination are classified in QD07X - *Corticosteroids, other combinations*.

Corticosteroids in combination with antifungals are classified in QD01A.

See also:

QA01AC - *Corticosteroids for local oral treatment*

QS - *Sensory organs*

QD07A CORTICOSTEROIDS, PLAIN

The group is subdivided according to the clinical potency of the steroids as such. Additional agents meant to enhance the penetration and increase the potency of the preparation do not influence the classification, nor does the strength of the preparations or the vehicle.

Combined preparations are classified in QD07B - *Corticosteroids, combination with antiseptics*, QD07C - *Corticosteroids, combinations with antibiotics* and QD07X - *Corticosteroids, other combinations*.

**QD07AA** *Corticosteroids, weak (group I)*

**QD07AB** *Corticosteroids, moderately potent (group II)*

**QD07AC** *Corticosteroids, potent (group III)*

**QD07AD** *Corticosteroids, very potent (group IV)*

QD07B CORTICOSTEROIDS, COMBINATIONS WITH ANTISEPTICS

Combined corticosteroid/antiseptic preparations for dermatological use are classified in this group. The group is subdivided according to clinical potency, see QD07A. Exceptions, see the comment on QD07. In each 5th level group various antiseptics may occur.

**QD07BA** *Corticosteroids, weak, combinations with antiseptics*

**QD07BB** *Corticosteroids, moderately potent, combinations with antiseptics*

**QD07BC** *Corticosteroids, potent, combinations with antiseptics*

**QD07BD** *Corticosteroids, very potent, combinations with antiseptics*

QD07C CORTICOSTEROIDS, COMBINATIONS WITH ANTIBIOTICS

Combined corticosteroid/antibiotic preparations for dermatological use should be classified in this group.

The group is subdivided according to clinical potency, see QD07A. For exceptions, see the comment on QD07.

In each 5th level group various antibiotics may occur.

Combinations of corticosteroids, gentamicin and imidazole and triazole derivatives are classified here. Combinations of corticosteroids and imidazole and triazole derivatives are classified in QD01AC - *Imidazole and triazole derivatives*.

**QD07CA** *Corticosteroids, weak, combinations with antibiotics*

**QD07CB** *Corticosteroids, moderately potent, combinations with antibiotics*

**QD07CC** *Corticosteroids, potent, combinations with antibiotics*

Combinations of beclomethasone, gentamicin and clotrimazole are classified here.

**QD07CD** *Corticosteroids, very potent, combinations with antibiotics*

**QD07X CORTICOSTEROIDS, OTHER COMBINATIONS**

Most other combined corticosteroid preparations for dermatological use, e.g. combinations with coal tar, carbamide and salicylic acid, should be classified in this group. Salicylic acid is regarded as a keratolytic agent. Preparations with salicylic acid and antiseptics are classified in this group, as salicylic acid is regarded as being more important in relation to the therapeutic use of these preparations (seborrhea).

The group is subdivided according to clinical potency, see comments on QD07A. For exceptions see the comment on QD07.

In each 5th level group various combinations may occur.

Corticosteroids in combination with antifungals are classified in QD01A.

**QD07XA Corticosteroids, weak, other combinations**

**QD07XB Corticosteroids, moderately potent, other combinations**

**QD07XC Corticosteroids, potent, other combinations**

**QD07XD Corticosteroids, very potent, other combinations**

**QD08 ANTISEPTICS AND DISINFECTANTS**

**QD08A ANTISEPTICS AND DISINFECTANTS**

All dermatological antiinfective preparations which are not classified in any of the following groups should be assigned to this group:

QD01 - *Antifungals for dermatological use*

QD03A - *Cicatrizers*

QD06 - *Antibiotics and chemotherapeutics for dermatological use*

QD07B - *Corticosteroids, combinations with antiseptics*

QD07X - *Corticosteroids, other combinations*

QD09A - *Medicated dressings*

QD11AC - *Medicated shampoos*

QP53A - *Ectoparasiticides for topical use*

Antiviral agents, see QD06BB.

Products for teats and udder are classified in QG52A.

The group is subdivided according to chemical structure.

At each 5th plain level combinations with alcohols are allowed.

**QD08AA Acridine derivatives**

**QD08AB Aluminium agents**

Combinations with quaternary ammonium compounds are classified in QD08AJ - *Quaternary ammonium compounds*.

**QD08AC Biguanides and amidines**

**QD08AD Boric acid products**

Weak boric acid vaseline is classified in QD02AX - *Other emollients and protectives*.

**QD08AE** *Phenol and derivatives*

Each 5th level also allows combinations with alcohol.

**QD08AF** *Nitrofuran derivatives*

**QD08AG** *Iodine products*

See also QD03AX and QD09AA. Cadexomer iodine is classified in QD03AX.

Medicated dressings containing iodine are classified in QD09AA.

**QD08AH** *Quinoline derivatives*

Chloroquininaldol and clioquinol are classified in this group and not in QD01 - *Antifungals for dermatological use*.

**QD08AJ** *Quaternary ammonium compounds*

Combinations with aluminium agents are classified here.

**QD08AK** *Mercurial products*

Combined preparations which also contain silver compounds are classified in this group.

**QD08AL** *Silver compounds*

Combined preparations which also contain mercury compounds, see QD08AK - *Mercurial products*.

**QD08AX** *Other antiseptics and disinfectants*

Hydrogenperoxide ≥ 40% solutions used in the treatment of seborrheic keratosis or warts are classified in QD11AX.

**QD09** **MEDICATED DRESSINGS**

**QD09A** **MEDICATED DRESSINGS**

Medicated dressings, ointment dressings etc. are classified in this group. Liquid wound protectives are classified in QD02AD - *Liquid plasters*. Local hemostatics, e.g. gauze, tampons etc. are classified in QB02BC - *Local hemostatics*.

**QD09AA** *Ointment dressings with antiinfectives*

See also QD03AX and QD08AG.

**QD09AB** *Zinc bandages*

Zinc bandages with or without supplements are classified in this group.

**QD09AX** *Soft paraffin dressings*

Dressings with antiinfectives, see QD09AA.

Dressings with scarlet red are classified in this group.

<b>QD10</b>	<b>ANTI-ACNE PREPARATIONS</b>
QD10A	ANTI-ACNE PREPARATIONS FOR TOPICAL USE
<b>QD10AA</b>	<b><i>Corticosteroids, combinations for treatment of acne</i></b>
<b>QD10AB</b>	<b><i>Preparations containing sulfur</i></b>
<b>QD10AD</b>	<b><i>Retinoids for topical use in acne</i></b>
	All retinoids for topical use are classified in QD10AD, including combinations with antibacterials.
<b>QD10AE</b>	<b><i>Peroxides</i></b>
<b>QD10AF</b>	<b><i>Antiinfectives for treatment of acne</i></b>
<b>QD10AX</b>	<b><i>Other anti-acne preparations for topical use</i></b>
QD10B	ANTI-ACNE PREPARATIONS FOR SYSTEMIC USE
<b>QD10BA</b>	<b><i>Retinoids for treatment of acne</i></b>
<b>QD10BX</b>	<b><i>Other anti-acne preparations for systemic use</i></b>
<b>QD11</b>	<b>OTHER DERMATOLOGICAL PREPARATIONS</b>
QD11A	OTHER DERMATOLOGICAL PREPARATIONS
	Various dermatological preparations which cannot be classified in the preceding groups should be assigned to this group.
<b>QD11AA</b>	<b><i>Antihidrotics</i></b>
<b>QD11AC</b>	<b><i>Medicated shampoos</i></b>
<b>QD11AE</b>	<b><i>Androgens for topical use</i></b>
<b>QD11AF</b>	<b><i>Wart and anti-corn preparations</i></b>
	Hydrogenperoxide ≥40% solutions used in the treatment of seborrheic keratosis or warts are classified in QD11AX.
<b>QD11AH</b>	<b><i>Agents for dermatitis, excluding corticosteroids</i></b>
	Immunosuppressants for systemic use indicated for treatment of dermatitis and pruritus should be classified here. Other systemic immunosuppressants are classified in QL04A - <i>Immunosuppressants</i> .
	Corticosteroids, see QD07.
<b>QD11AX</b>	<b><i>Other dermatologicals</i></b>
	Hydrogenperoxide ≥40% solutions used in the treatment of seborrheic keratosis or warts are classified here, while low strength solutions are classified in QD08AX.
QD51	PRODUCTS FOR THE TREATMENT OF CLAWS AND HOOFS

**QG            GENITO URINARY SYSTEM AND SEX HORMONES**

**QG01        GYNECOLOGICAL ANTIINFECTIVES AND ANTISEPTICS**

- A    *Antiinfectives and antiseptics, excl. combinations with corticosteroids*
- B    *Antiinfectives/antiseptics in combination with corticosteroids*

**QG02        OTHER GYNECOLOGICALS**

- A    *Uterotonics*
- B    *Contraceptives for topical use*
- C    *Other gynecologicals*

**QG03        SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM**

- A    *Hormonal contraceptives for systemic use*
- B    *Androgens*
- C    *Estrogens*
- D    *Progestogens*
- E    *Androgens and female sex hormones in combination*
- F    *Progestogens and estrogens in combination*
- G    *Gonadotrophins and other ovulation stimulants*
- H    *Antiandrogens*
- X    *Other sex hormones and modulators of the genital system*

**QG04        UROLOGICALS**

- B    *Urologicals*
- C    *Drugs used in benign prostatic hypertrophy*

**QG51        ANTIINFECTIVES AND ANTISEPTICS FOR INTRAUTERINE USE**

- A    *Antiinfectives and antiseptics for intrauterine use*

**QG52        PRODUCTS FOR TEATS AND UDDER**

**QG**

## **GENITO URINARY SYSTEM AND SEX HORMONES**

The group QG comprises gynecological antiinfectives and antiseptics for local, intrauterine and intravaginal use. Urologicals for systemic use specifically used in urinary tract infections should be classified in QJ - *Antiinfectives for systemic use*.

Substances such as the ergot alkaloids, which are used to stimulate uterine contractions, are found in this group along with prostaglandins and analogues. However, plain preparations of oxytocin and derivatives should be classified in QH01B - *Posterior pituitary lobe hormones*. Other substances, e.g. the prolactin inhibitors bromocriptine and cabergoline, and antiinflammatory products for vaginal administration, are classified in QG.

Hormonal contraceptives for systemic and local use are found here, as are similar hormonal products used for estrus synchronization. Substances used to stimulate ovulation, e.g. gonadotrophin-releasing hormone (GnRH) and analogues, are classified in QG. However, GnRH and analogues are to be classified in QH01CA when the purpose is not to stimulate ovulation.

Finally, QG also includes two groups specific to the ATCvet system, QG51 - *Antiinfectives and antiseptics for intrauterine use* and QG52 - *Products for the care of teats and udder*.

**QG01**

### **GYNECOLOGICAL ANTIINFECTIVES AND ANTISEPTICS**

Gynecological antiinfectives and antiseptics, mainly for local and intravaginal use, should be classified in this group.

See also:

- QD06 - *Antibiotics and chemotherapeutics for dermatological use*
- QG51 - *Antiinfectives and antiseptics for intrauterine use*
- QG52A - *Disinfectants*
- QJ - *Antiinfectives for systemic use*
- QP51AA - *Nitroimidazole derivatives*

**QG01A**

### ANTIINFECTIVES AND ANTISEPTICS, EXCL. COMBINATIONS WITH CORTICOSTEROIDS

Preparations mainly for local use, including intravaginal use, are classified in this group. Antivirals for topical use, including gynecological use, such as podophyllotoxin, are classified in QD06 - *Antibiotics and chemotherapeutics for dermatological use*.

Combinations with corticosteroids should be classified in QG01B - *Antiinfectives/antiseptics in combination with corticosteroids*.

**QG01AA**

#### ***Antibiotics***

Combinations with sulfonamides are classified in QG01AE - *Sulfonamides*.

Nystatin in combination with nifuratel is classified in QG01AA51.

**QG01AB**

#### ***Arsenic compounds***

**QG01AC** *Quinoline derivatives*

**QG01AD** *Organic acids*

**QG01AE** *Sulfonamides*

Combinations of different sulfonamides are classified using the ATCvet 5th level code QG01AE10.

**QG01AF** *Imidazole derivatives*

Imidazole derivatives in formulations for vaginal administration are classified in this group.

Parenteral formulations are classified in QJ01XD - *Imidazole derivatives*, as they are mainly used in anaerobic infections. Imidazole derivatives in oral and rectal dosage forms are classified in QP51A - *Agents against protozoal diseases*.

Metronidazole for topical use in skin disorders is classified in QD06BX - *Other chemotherapeutics*. Other imidazole derivatives for topical use in skin disorders are classified in QD01A - *Antifungals for topical use*.

The combination of econazole and benzydamine is classified in QG01AF55.

**QG01AG** *Triazole derivatives*

**QG01AX** *Other antiinfectives and antiseptics*

Nifuratel in combination with nystatin is classified in QG01AA51.

**QG01B** ANTIINFECTIVES/ANTISEPTICS IN COMBINATION WITH CORTICOSTEROIDS

Antiinfectives/antiseptics for gynecological use which contain corticosteroids are classified in this group. See also QG51AG - *Antiinfectives and/or antiseptics, combinations for intrauterine use*.

**QG01BA** *Antibiotics and corticosteroids*

**QG01BC** *Quinoline derivatives and corticosteroids*

**QG01BD** *Antiseptics and corticosteroids*

**QG01BE** *Sulfonamides and corticosteroids*

**QG01BF** *Imidazole derivatives and corticosteroids*

**QG02** OTHER GYNECOLOGICALS

**QG02A** UTEROTONICS

Plain preparations of oxytocin and analogues are classified in QH01B - *Posterior pituitary lobe hormones*.

**QG02AB** *Ergot alkaloids*

Ergot alkaloids, e.g. methylergometrine, used to stimulate uterine contractions should be classified in this group. Other ergot alkaloids are classified in QC04A - *Peripheral vasodilators*.

Combinations of ergometrine and estradiol are classified here.

**QG02AC** *Ergot alkaloids and oxytocin incl. analogues, in combination*

**QG02AD** *Prostaglandins*

**QG02AX** *Other uterotonicics*

Uterotonics, which cannot be classified in the preceding groups, should be assigned to this group.

**QG02B** **CONTRACEPTIVES FOR TOPICAL USE**

**QG02BA** *Intrauterine contraceptives*

**QG02BB** *Intravaginal contraceptives*

**QG02C** **OTHER GYNECOLOGICALS**

**QG02CA** *Sympathomimetics, labour repressants*

Sympathomimetics used to repress labour, e.g. vetrabutine, are classified in this group. Adrenergic substances which are mainly used as peripheral vasodilators, e.g. isoxsuprine, are classified in QC04A - *Peripheral vasodilators*. Adrenergic drugs which are mainly used in the treatment of asthma are classified in QR03C - *Adrenergics for systemic use*.

Fenoterol and clenbuterol infusions only intended for repressing preterm labour are classified in this group, while other systemic formulas of these substances are classified in QR03C.

**QG02CB** *Prolactine inhibitors*

**QG02CC** *Antiinflammatory products for vaginal administration*

This group comprises e.g. non-steroidal antiinflammatory drugs for vaginal administration.

The combination of econazole and benzydamine is classified in QG01AF55 *econazole, combinations*.

**QG02CX** *Other gynecologicals*

**QG03** **SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM**

Other hormones, see QH - *Systemic hormonal preparations, excl. sex hormones and insulins*.

**QG03A** **HORMONAL CONTRACEPTIVES FOR SYSTEMIC USE**

Hormonal preparations, which are used as contraceptives, should be classified here.

Similar hormonal preparations which are used for estrus synchronization are classified in QG03F - *Progestogens and estrogens in combination*.

**QG03AA** *Progestogens and estrogens, fixed combinations*

**QG03AB** *Progestogens and estrogens, sequential products*

**QG03AC** *Progestogens*

Progestogens used as hormonal contraceptives are classified in this group.

Progestogens for other gynecological uses are classified in QG03D.

**QG03AD** *Emergency contraceptives*

QG03B ANDROGENS

Anabolic steroids are classified in QA14A - *Anabolic steroids*. Male sex hormones should be classified in this group. Combined products are included in this group, except for combinations with female sex hormones, which should be classified in QG03E - *Androgens and female sex hormones in combination*.

The group is subdivided according to chemical structure.

**QG03BA** *3-oxoandrosten (4) derivatives*

**QG03BB** *5-androstanon (3) derivatives*

QG03C ESTROGENS

Plain estrogens and combinations should be classified in this group, except for combinations with:

Androgens, which are classified in QG03E

Progestogens, which are classified in QG03F

Gonadotrophins, which are classified in QG03G

Hormonal contraceptives, which are classified in QG03A

Estrogens used only in neoplastic diseases, see QL02AA

**QG03CA** *Natural and semisynthetic estrogens, plain*

Preparations which contain one or more natural or semisynthetic estrogen should be classified in this group. Estradiol/polyestradiol are classified in the same 5th level group. The same applies to estriol/polyestriol. Combinations with other substances are classified in QG03CC.

Combinations of estradiol and ergometrine are classified in QG02AB53 - *ergometrine, combinations*.

Estropipate is classified in QG03CA07 - *estrone*.

**QG03CB** *Synthetic estrogens, plain*

Preparations, which contain synthetic estrogens, only should be classified in this group.

Combinations with other substances, see QG03CC.

**QG03CC** *Estrogens, combinations with other drugs*

Preparations, which contain combinations of natural, semisynthetic or synthetic estrogens and other substances, are classified in this group.

**QG03CX Other estrogens**

Tibolone is classified in this group even though the chemical structure is different from the other estrogens.

**QG03D PROGESTOGENS**

Progestogens and combinations are classified in this group, except for combinations with:

Androgens, which are classified in QG03E

Estrogens, which are classified in QG03F

Gonadotrophins, which are classified in QG03G

Hormonal contraceptives, which are classified in QG03A

Progestogens used only in neoplastic diseases, see QL02AB

The group is subdivided according to chemical structure.

**QG03DA *Pregnen (4) derivatives***

**QG03DB *Pregnadien derivatives***

**QG03DC *Estren derivatives***

Tibolone is classified in QG03CX.

**QG03DX *Other progestogens***

Delmadinone is classified in this group.

**QG03E ANDROGENS AND FEMALE SEX HORMONES IN COMBINATION**

Preparations containing androgen and estrogen and/or progestogen should be classified in this group. They are classified at the 5th level according to the androgen concerned.

**QG03EA *Androgens and estrogens***

**QG03EB *Androgen, progestogen and estrogen in combination***

**QG03EK *Androgens and female sex hormones in combination with other drugs***

**QG03F PROGESTOGENS AND ESTROGENS IN COMBINATION**

Combined preparations used for the synchronization of estrus should be classified in this group. Hormonal contraceptives, see QG03A - *Hormonal contraceptives for systemic use*.

**QG03FA *Progestogens and estrogens, fixed combinations***

Preparations which contain combinations of progestogens and estrogens should be classified in this group. They are classified at the 5th level according to the progestogen they contain. In each 5th level group various estrogens may occur.

**QG03FB *Progestogens and estrogens, sequential preparations***

QG03G	GONADOTROPINS AND OTHER OVULATION STIMULANTS
	Gonadotropin releasing hormone (GnRH) and analogues, see QH01CA.
	Gonadotropin releasing hormone (GnRH) analogues, used specifically in the treatment of neoplastic diseases, see QL02AE.
	Gonadotropins, plain and in combination with estrogens and progestogens, should be classified in this group.
<b>QG03GA</b>	<b><i>Gonadotropins</i></b>
	This group comprises both naturally occurring gonad-stimulating hormones and synthetic ovulation stimulants.
	G03GA02 comprises products of human origin (e.g. menotrophin) while G03GA30 comprises combinations of recombinant hormones (e.g. follitropin alfa and lutropin alfa).
	Human gonadotrophin is classified in QG03GA01 <i>Chorionic gonadotrophin</i> , while equine gonadotrophin, formerly known as pregnant mare serum gonadotropin is classified in QG03GA03 <i>Serum gonadotrophin</i> .
<b>QG03GB</b>	<b><i>Ovulation stimulants, synthetic</i></b>
QG03H	ANTIANDROGENS
<b>QG03HA</b>	<b><i>Antiandrogens, plain</i></b>
	Finasteride used for treatment of benign prostatic hypertrophy is classified in QG04CB.
<b>QG03HB</b>	<b><i>Antiandrogens and estrogens</i></b>
	This group comprises all combinations of cyproterone and estrogen regardless of indication.
QG03X	OTHER SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM
	Substances modifying the genital functions, which cannot be assigned to any of the preceding groups, should be classified in this group.
<b>QG03XA</b>	<b><i>Antigonadotropins and similar agents</i></b>
	This group includes agents that exerts their effect either by pharmacological or by immunological action.
<b>QG03XB</b>	<b><i>Progesterone receptor modulators</i></b>
<b>QG03XC</b>	<b><i>Selective estrogen receptor modulators</i></b>
<b>QG03XX</b>	<b><i>Other sex hormones and modulators of the genital system</i></b>

**QG04 UROLOGICALS**

Antiseptic and antiinfective preparations for systemic use specifically used in urinary tract infections, see group QJ. General antiinfectives for systemic use are classified in group QJ - *Antiinfectives for systemic use*. Gynecological antiinfectives and antiseptics, see QG01.

**QG04B UROLOGICALS**

Urological preparations other than antiseptics and antiinfectives should be classified in this group.

***QG04BA Acidifiers******QG04BC Urinary concrement solvents***

Plain potassium citrate preparations indicated for e.g. treatment of renal tubular acidosis with calcium stones are classified in QA12BA Potassium (QA12 - *Mineral supplements*).

***QG04BD Drugs for urinary frequency and incontinence***

Antispasmodics specifically used in the urogenital tract are classified in this group. Gastrointestinal antispasmodics, see QA03 - *Antispasmodic and anticholinergic agents and propulsives*.

***QG04BE Drugs used in erectile dysfunction******QG04BQ Urinary alkalinizers***

Urinary alkalinizers specifically used in veterinary medicine are classified in this group.

***QG04BX Other urologicals***

Urologicals which cannot be classified in the preceding groups, should be assigned to this group.

**QG04C DRUGS USED IN BENIGN PROSTATIC HYPERPLASIA*****QG04CA Alpha-adrenoreceptor antagonists******QG04CB Testosterone-5-alpha reductase inhibitors***

Combinations/combination packages with alpha-adrenoreceptor antagonists are classified in QG04CA.

***QG04CX Other drugs used in benign prostatic hypertrophy*****QG51 ANTIINFECTIVES AND ANTISEPTICS FOR INTRAUTERINE USE**

Antiinfectives and antiseptics for intrauterine use should be classified in this group. Gynecological antiinfectives and antiseptics for intra -vaginal use are classified in QG01.

QG51A ANTIINFECTIVES AND ANTISEPTICS FOR INTRAUTERINE USE  
Combined products should be classified in QG51AG. Antivirals for topical use, including gynecological use, such as podophyllotoxin, are classified in QD06 - *Antibiotics and chemotherapeutics for dermatological use*.

**QG51AA** *Antibacterials*

**QG51AD** *Antiseptics*

**QG51AG** *Antiinfectives and/or antiseptics, combinations for intrauterine use*

All combinations with antiinfectives and/or antiseptics for intrauterine use are classified in this group.

**QG52** **PRODUCTS FOR TEATS AND UDDER**

Preparations, irrespective of whether they are medical preparations or not, are classified in QG52.

QG52A DISINFECTANTS

QG52B TEAT CANAL DEVICES

Mechanical devices are classified here.

QG52C EMOLLIENTS

QG52X VARIOUS PRODUCTS FOR TEATS AND UDDER

Bismuth subnitrate, intramammary suspension, is classified here.

**QH      SYSTEMIC HORMONAL PREPARATIONS, EXCL. SEX HORMONES AND INSULINS**

**QH01    PITUITARY AND HYPOTHALAMIC HORMONES AND ANALOGUES**

- A    *Anterior pituitary lobe hormones and analogues*
- B    *Posterior pituitary lobe hormones*
- C    *Hypothalamic hormones*

**QH02    CORTICOSTEROIDS FOR SYSTEMIC USE**

- A    *Corticosteroids for systemic use, plain*
- B    *Corticosteroids for systemic use, combinations*
- C    *Antiadrenal preparations*

**QH03    THYROID THERAPY**

- A    *Thyroid preparations*
- B    *Antithyroid preparations*
- C    *Iodine therapy*

**QH04    PANCREATIC HORMONES**

- A    *Glycogenolytic hormones*

**QH05    CALCIUM HOMEOSTASIS**

- A    *Parathyroid hormones and analogues*
- B    *Anti-parathyroid agents*

**QH      SYSTEMIC HORMONAL PREPARATIONS, EXCL. SEX HORMONES AND INSULINS**

The group QH comprises hormonal preparations for systemic use, excluding sex hormones and insulins. Sex hormones are classified in QG - *Genito urinary system and sex hormones*. Insulins are classified in QA10 - *Drugs used in diabetes*. Note that there are hormonal preparations for systemic use that should be classified in other groups. For example, plain preparations of oxytocin and derivatives are classified in this group, but when combined with ergot alkaloids they are assigned to QG - *Genito urinary system and sex hormones*.

Gonadotrophin-releasing hormone (GnRH) and analogues are classified in this group, but they are assigned to QG when the aim is to stimulate ovulation, or to the group QL - *Antineoplastic and immunomodulating agents* when the product is used for neoplastic diseases.

Corticosteroids for systemic use (including preparations for local injection) are classified in this group, with the exception of antiinflammatory agents in combination with corticosteroids, which should be classified in QM01BA. Preparations used in thyroid therapy, as well as iodine products for systemic use, are found in QH. Pancreatic hormones e.g. glucagon, are found here, but not the insulins, which are classified in QA10A - *Insulins and analogues*. Hormonal preparations acting on the calcium homeostasis are also classified here.

Hormonal preparations for systemic use should be classified in this group, except for:

- QA10A - *Insulins and analogues*
- QA14 - *Anabolic agents for systemic use*
- QC01C - *Cardiac stimulants excl. cardiac glycosides*
- QG03 - *Sex hormones and modulators of the genital system*
- QL02 - *Endocrine therapy*
- QR03C - *Adrenergics for systemic use*

**QH01    PITUITARY AND HYPOTHALAMIC HORMONES AND ANALOGUES**

**QH01A    ANTERIOR PITUITARY LOBE HORMONES AND ANALOGUES**

Anterior pituitary lobe hormones, e.g. extracts, purified natural hormones and synthetic analogues, should be classified in this group.

Somatropin antagonists are classified in QH01AX.

**QH01AA    ACTH**

ACTH and synthetic analogues should be classified in this group.

**QH01AB    Thyrotrophin**

**QH01AC    Somatropin and somatropin agonists**

**QH01AX Other anterior pituitary lobe hormones and analogues**

Somatropin antagonists are classified here.

Capromorelin indicated for body weight gain is classified in QH01AX.

**QH01B POSTERIOR PITUITARY LOBE HORMONES**

Posterior pituitary lobe hormones, e.g. extracts, purified natural hormones and synthetic analogues, should be classified in this group.

**QH01BA Vasopressin and analogues**

**QH01BB Oxytocin and analogues**

Oxytocin and derivatives in combination with ergot alkaloids are classified in QG02A - *Uterotonics*.

**QH01C HYPOTHALAMIC HORMONES**

Hypothalamic hormones, e.g. extracts, purified natural hormones and synthetic analogues, should be classified in this group. See also QV04CD - *Tests for pituitary function*.

**QH01CA Gonadotropin-releasing hormones**

Gonadorelin used as a diagnostic agent is classified in QV04CM - *Tests for fertility disturbances*.

In the ATCvet system, the proper classification of buserelin is here.

**QH01CB Somatostatin and analogues**

**QH01CC Anti-gonadotropin-releasing hormones**

**QH02 CORTICOSTEROIDS FOR SYSTEMIC USE**

As a general rule, systemic corticosteroids should be classified in this group.

There is, however, one exception: QM01BA - *Antiinflammatory antirheumatic agents in combination with corticosteroids*.

Corticosteroids for local oral treatment, see QA01AC.

Oral corticosteroids solely indicated for the treatment of intestinal inflammatory diseases are classified in QA07E - *Intestinal antiinflammatory agents*.

Corticosteroids for topical use, see QD07.

Corticosteroids in combination with antiinfectives/antiseptics for local treatment of gynecological infections, see QG01B and for intrauterine infections, see QG51AG.

Corticosteroids for inhalation, see QR03B.

Corticosteroids, eye/ear products, see QS.

QH02A CORTICOSTEROIDS FOR SYSTEMIC USE, PLAIN  
Only plain preparations are classified in this group. The group also includes corticosteroid preparations for local injection.

**QH02AA** *Mineralocorticoids*

**QH02AB** *Glucocorticoids*

QH02B GLUCOCORTICOIDS FOR SYSTEMIC USE, COMBINATIONS  
This group comprises all combined preparations, e.g. combinations with local anesthetics.

**QH02BX** *Corticosteroids for systemic use, combinations*

QH02C ANTIADRENAL PREPARATIONS

**QH02CA** *Anticorticosteroids*

Pharmaceutical formulations of ketoconazole solely indicated in Cushing's syndrome are classified in this group.

**QH03** **THYROID THERAPY**

QH03A THYROID PREPARATIONS

Thyroid extracts and synthetic analogues used in the treatment of hypothyrosis should be classified in this group.

**QH03AA** *Thyroid hormones*

Natural and synthetic thyroid hormones should be classified in this group. Combinations of levothyroxine and liothyronine are classified using the ATCvet 5th level code QH03AA03.

Liothyronine hydrochloride is classified in QH03AA02.

QH03B ANTITHYROID PREPARATIONS

Preparations used in the treatment of hyperthyrosis should be classified in this group.

**QH03BA** *Thiouracils*

**QH03BB** *Sulfur-containing imidazole derivatives*

**QH03BC** *Perchlorates*

**QH03BX** *Other antithyroid preparations*

QH03C IODINE THERAPY

Iodine preparations for systemic use should be classified in this group.

**QH03CA** *Iodine therapy*

**QH04** **PANCREATIC HORMONES**  
**QH04A** **GLYCOGENOLYTIC HORMONES**  
**QH04AA** ***Glycogenolytic hormones***

The pancreas glycogenolytic hormone glucagon is classified in this group. Insulins are classified in QA10A - *Insulins and analogues*.

**QH05** **CALCIUM HOMEOSTASIS**

Preparations acting on calcium homeostasis are classified in this group.

Vitamin-D products, see QA11C - *Vitamin A and D, incl. combinations of the two*.

**QH05A** **PARATHYROID HORMONES AND ANALOGUES**  
**QH05AA** ***Parathyroid hormones and analogues***

Extracts from parathyroid glands are classified in this group.

**QH05B** **ANTI-PARATHYROID AGENTS**

**QH05BA** ***Calcitonin preparations***

Calcitonin, natural and synthetic, is classified in this group. Other substances for treatment of hypercalcemia, see QM05B - *Drugs affecting bone structure and mineralization*.

**QH05BX** ***Other anti-parathyroid agents***

Paricalcitol and doxercalciferol indicated for the prevention and treatment of secondary hyperparathyroidism are classified here.

Oral formulations of calcifediol, solely approved for treatment of renal secondary hyperparathyroidism are classified here, while all other pharmaceutical formulations of calcifediol are classified in QA11CC06.

**Q1            IMMUNOLOGICALS**

**Q101        IMMUNOLOGICALS FOR AVES**

- A     *Domestic fowl*
- B     *Duck*
- C     *Turkey*
- D     *Goose*
- E     *Pigeon*
- F     *Pheasant*
- G     *Quail*
- H     *Partridge*
- I     *Ostrich*
- K     *Pet birds*
- X     *Aves, others*

**Q102        IMMUNOLOGICALS FOR BOVIDAE**

- A     *Cattle*
- B     *Buffalo*
- X     *Bovidae, others*

**Q103        IMMUNOLOGICALS FOR CAPRIDAE**

- A     *Goat*
- X     *Capridae, others*

**Q104        IMMUNOLOGICALS FOR OVIDAE**

- A     *Sheep*
- X     *Ovidae, others*

**Q105        IMMUNOLOGICALS FOR EQUIDAE**

- A     *Horse*
- B     *Azinine/Donkey*
- C     *Hybride*
- X     *Equidae, others*

**Q106        IMMUNOLOGICALS FOR FELIDAE**

- A     *Cat*
- X     *Felidae, others*

**Q107        IMMUNOLOGICALS FOR CANIDAE**

- A     *Dog*
- B     *Fox*
- X     *Canidae, others*

**Q108        IMMUNOLOGICALS FOR LEPORIDAE**

- A     *Rabbit*
- B     *Hare*
- X     *Leporidae, others*

**Q109      IMMUNOLOGICALS FOR SUIDAE**

- A      *Pig*
- X      *Suidae, others*

**Q110      IMMUNOLOGICALS FOR PISCES**

- A      *Atlantic salmon*
- B      *Rainbow trout*
- C      *Carp*
- D      *Turbot*
- E      *Ornamental fish*
- X      *Pisces, others*

**Q111      IMMUNOLOGICALS FOR RODENTS**

- A      *Rat*
- B      *Mouse*
- C      *Guinea-pig*
- X      *Rodents, others*

**Q120      IMMUNOLOGICALS FOR OTHER SPECIES**

- A      *Red deer*
- B      *Reindeer*
- C      *Mink*
- D      *Ferret*
- E      *Snake*
- F      *Bee*
- X      *Others*

In the ATCvet classification system the main group QI comprises immunologicals for veterinary use, including, vaccines, immune sera and immunoglobulins. The ATCvet group QI has been created to accommodate killed or attenuated microorganisms (bacteria, virus etc.), antigenic proteins derived from them, or synthetic constructs. Vaccines are used for the prevention, amelioration, or treatment of infectious diseases. In addition, the classification in group QI enables products to be classified according to species. The main group QI has been in use since January 2000. Earlier, vaccines were classified in QJ57, and immune sera and immunoglobulins in QJ56.

Immunologicals indicated for use in several species are classified according to the species regarded as the main one for prophylaxis. For example, monovalent vaccines against rabies are assigned to QI07 - *Canidae*. However, rabies antigens combined with other components might be classified under other main-group species.

If it is not possible to decide the main species for the vaccine a ranking of main species should be performed according to the sequence of species in the ATCvet QI 2nd levels. A species with a low number in the sequence of ATCvet code should then have precedence over a species with a higher number (e.g. sheep (QI04) has precedence over horse (QI05)).

Non-specific immunostimulating agents are classified in the 4th level group X - *Other immunologicals*, under whichever main group is considered most relevant. Other immunologicals, e.g. interferons and cytokines, are assigned to QL03 - *Immunostimulants*.

As far as possible, products are classified consistently on the basis of the agents involved, but to make the system easy to use, sometimes both the agent and the name of the disease are given. The ATCvet 5th level does not reflect the manufacturing process, e.g. recombinant is usually not included in the level names.

Both for individual antigens and for combinations of antigens, any number from 1-99 may be used as a 5th level code. Unlike combinations of substances other than immunologicals, specific 5th level code series (i.e. 20, 30, 50 or 99) are not reserved for combinations of antigens in group QI.

At the 4th level, all immunologicals are classified according to a specific structure.

**QI01      IMMUNOLOGICALS FOR AVES**

QI01A      DOMESTIC FOWL

**QI01AA**      *Inactivated viral vaccines*

**QI01AB**      *Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)*

**QI01AC**      *Inactivated bacterial vaccines and antisera*

**QI01AD**      *Live viral vaccines*

**QI01AE**      *Live bacterial vaccines*

**QI01AF**      *Live bacterial and viral vaccines*

<i>QI01AG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI01AH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI01AI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI01AJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI01AK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI01AL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI01AM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI01AN</i>	<i>Live parasitic vaccines</i>
<i>QI01AO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI01AP</i>	<i>Live fungal vaccines</i>
<i>QI01AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI01AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI01AS</i>	<i>Allergens</i>
<i>QI01AU</i>	<i>Other live vaccines</i>
<i>QI01AV</i>	<i>Other inactivated vaccines</i>
<i>QI01AX</i>	<i>Other immunologicals</i>

*QI01B* DUCK

*QI01BA* ***Inactivated viral vaccines***

Parvovirus vaccines indicated for use in duck and goose are classified here.

<i>QI01BB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI01BC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI01BD</i>	<i>Live viral vaccines</i>
<i>QI01BE</i>	<i>Live bacterial vaccines</i>
<i>QI01BF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI01BG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI01BH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI01BI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI01BJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI01BK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI01BL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI01BM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI01BN</i>	<i>Live parasitic vaccines</i>
<i>QI01BO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI01BP</i>	<i>Live fungal vaccines</i>
<i>QI01BQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI01BR</i>	<i>In vivo diagnostic preparations</i>
<i>QI01BS</i>	<i>Allergens</i>
<i>QI01BU</i>	<i>Other live vaccines</i>
<i>QI01BV</i>	<i>Other inactivated vaccines</i>
<i>QI01BX</i>	<i>Other immunologicals</i>

QI01C	TURKEY
<i>QI01CA</i>	<i>Inactivated viral vaccines</i>
<i>QI01CB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI01CC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI01CD</i>	<i>Live viral vaccines</i>
<i>QI01CE</i>	<i>Live bacterial vaccines</i>
<i>QI01CF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI01CG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI01CH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI01CI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI01CJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI01CK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI01CL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI01CM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI01CN</i>	<i>Live parasitic vaccines</i>
<i>QI01CO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI01CP</i>	<i>Live fungal vaccines</i>
<i>QI01CQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI01CR</i>	<i>In vivo diagnostic preparations</i>
<i>QI01CS</i>	<i>Allergens</i>
<i>QI01CU</i>	<i>Other live vaccines</i>
<i>QI01CV</i>	<i>Other inactivated vaccines</i>
<i>QI01CX</i>	<i>Other immunologicals</i>

QI01D	GOOSE
<i>QI01DA</i>	<i>Inactivated viral vaccines</i>

Parvovirus vaccines indicated for use in duck and goose are classified in QI01BA01.

<i>QI01DB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI01DC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI01DD</i>	<i>Live viral vaccines</i>
<i>QI01DE</i>	<i>Live bacterial vaccines</i>
<i>QI01DF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI01DG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI01DH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI01DI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI01DJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI01DK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI01DL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI01DM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI01DN</i>	<i>Live parasitic vaccines</i>
<i>QI01DO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI01DP</i>	<i>Live fungal vaccines</i>
<i>QI01DQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI01DR</i>	<i>In vivo diagnostic preparations</i>
<i>QI01DS</i>	<i>Allergens</i>
<i>QI01DU</i>	<i>Other live vaccines</i>

<i>QI01DV</i>	<i>Other inactivated vaccines</i>
<i>QI01DX</i>	<i>Other immunologicals</i>
QI01E	PIGEON
<i>QI01EA</i>	<i>Inactivated viral vaccines</i>
<i>QI01EB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI01EC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI01ED</i>	<i>Live viral vaccines</i>
<i>QI01EE</i>	<i>Live bacterial vaccines</i>
<i>QI01EF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI01EG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI01EH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI01EI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI01EJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI01EK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI01EL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI01EM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI01EN</i>	<i>Live parasitic vaccines</i>
<i>QI01EO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI01EP</i>	<i>Live fungal vaccines</i>
<i>QI01EQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI01ER</i>	<i>In vivo diagnostic preparations</i>
<i>QI01ES</i>	<i>Allergens</i>
<i>QI01EU</i>	<i>Other live vaccines</i>
<i>QI01EV</i>	<i>Other inactivated vaccines</i>
<i>QI01EX</i>	<i>Other immunologicals</i>
QI01F	PHEASANT
QI01G	QUAIL
QI01H	PARTRIDGE
QI01I	OSTRICH
QI01K	PET BIRDS
<i>QI01KA</i>	<i>Inactivated viral vaccines</i>
<i>QI01KB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI01KC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI01KD</i>	<i>Live viral vaccines</i>
<i>QI01KE</i>	<i>Live bacterial vaccines</i>
<i>QI01KF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI01KG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI01KH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI01KI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI01KJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI01KK</i>	<i>Inactivated viral and live bacterial vaccines</i>

<i>QI01KL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI01KM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI01KN</i>	<i>Live parasitic vaccines</i>
<i>QI01KO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI01KP</i>	<i>Live fungal vaccines</i>
<i>QI01KQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI01KR</i>	<i>In vivo diagnostic preparations</i>
<i>QI01KS</i>	<i>Allergens</i>
<i>QI01KU</i>	<i>Other live vaccines</i>
<i>QI01KV</i>	<i>Other inactivated vaccines</i>
<i>QI01KX</i>	<i>Other immunologicals</i>

QI01X AVES, OTHERS

<b>QI02</b>	<b>IMMUNOLOGICALS FOR BOVIDAE</b>
QI02A	CATTLE
<i>QI02AA</i>	<i>Inactivated viral vaccines</i>
<i>QI02AB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI02AC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI02AD</i>	<i>Live viral vaccines</i>
<i>QI02AE</i>	<i>Live bacterial vaccines</i>
<i>QI02AF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI02AG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI02AH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI02AI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI02AJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI02AK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI02AL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI02AM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI02AN</i>	<i>Live parasitic vaccines</i>
<i>QI02AO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI02AP</i>	<i>Live fungal vaccines</i>
<i>QI02AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI02AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI02AS</i>	<i>Allergens</i>
<i>QI02AT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI02AU</i>	<i>Other live vaccines</i>
<i>QI02AV</i>	<i>Other inactivated vaccines</i>

Papilloma vaccines are classified in this group.

*QI02AX* *Other immunologicals*

QI02B BUFFALO

QI02X BOVIDAE, OTHERS

QI03	<b>IMMUNOLOGICALS FOR CAPRIDAE</b>
QI03A	GOAT
	Clostridium vaccines are classified in QI03AB - <i>Inactivated bacterial vaccines</i> , or QI03AE - <i>Live bacterial vaccines</i> .
<i>QI03AA</i>	<b><i>Inactivated viral vaccines</i></b>
<i>QI03AB</i>	<b><i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i></b>
	Mycobacterium vaccines indicated for use in sheep and goats are classified in QI04AB09. Staphylococcus vaccines indicated for use in sheep and goats are classified in QI04AB10.
<i>QI03AC</i>	<b><i>Inactivated bacterial vaccines and antisera</i></b>
<i>QI03AD</i>	<b><i>Live viral vaccines</i></b>
<i>QI03AE</i>	<b><i>Live bacterial vaccines</i></b>
<i>QI03AF</i>	<b><i>Live bacterial and viral vaccines</i></b>
<i>QI03AG</i>	<b><i>Live and inactivated bacterial vaccines</i></b>
<i>QI03AH</i>	<b><i>Live and inactivated viral vaccines</i></b>
<i>QI03AI</i>	<b><i>Live viral and inactivated bacterial vaccines</i></b>
<i>QI03AJ</i>	<b><i>Live and inactivated viral and bacterial vaccines</i></b>
<i>QI03AK</i>	<b><i>Inactivated viral and live bacterial vaccines</i></b>
<i>QI03AL</i>	<b><i>Inactivated viral and inactivated bacterial vaccines</i></b>
<i>QI03AM</i>	<b><i>Antisera, immunoglobulin preparations, and antitoxins</i></b>
<i>QI03AN</i>	<b><i>Live parasitic vaccines</i></b>
<i>QI03AO</i>	<b><i>Inactivated parasitic vaccines</i></b>
<i>QI03AP</i>	<b><i>Live fungal vaccines</i></b>
<i>QI03AQ</i>	<b><i>Inactivated fungal vaccines</i></b>
<i>QI03AR</i>	<b><i>In vivo diagnostic preparations</i></b>
<i>QI03AS</i>	<b><i>Allergens</i></b>
<i>QI03AT</i>	<b><i>Colostrum preparations and substitutes</i></b>
<i>QI03AU</i>	<b><i>Other live vaccines</i></b>
<i>QI03AV</i>	<b><i>Other inactivated vaccines</i></b>
<i>QI03AX</i>	<b><i>Other immunologicals</i></b>
QI03X	CAPRIDAE, OTHERS
QI04	<b>IMMUNOLOGICALS FOR OVIDAE</b>
QI04A	SHEEP
<i>QI04AA</i>	<b><i>Inactivated viral vaccines</i></b>
<i>QI04AB</i>	<b><i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i></b>
	Mycobacterium vaccines and Staphylococcus vaccines indicated for use in sheep and goats are classified here.
<i>QI04AC</i>	<b><i>Inactivated bacterial vaccines and antisera</i></b>
<i>QI04AD</i>	<b><i>Live viral vaccines</i></b>
<i>QI04AE</i>	<b><i>Live bacterial vaccines</i></b>
<i>QI04AF</i>	<b><i>Live bacterial and viral vaccines</i></b>
<i>QI04AG</i>	<b><i>Live and inactivated bacterial vaccines</i></b>

<i>QI04AH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI04AI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI04AJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI04AK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI04AL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI04AM</i>	<i>Antisera, immunoglobulin preparations and antitoxins</i>
<i>QI04AN</i>	<i>Live parasitic vaccines</i>
<i>QI04AO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI04AP</i>	<i>Live fungal vaccines</i>
<i>QI04AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI04AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI04AS</i>	<i>Allergens</i>
<i>QI04AT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI04AU</i>	<i>Other live vaccines</i>
<i>QI04AV</i>	<i>Other inactivated vaccines</i>
<i>QI04AX</i>	<i>Other immunologicals</i>

QI04X OVIDAE, OTHERS

<b>QI05</b>	<b>IMMUNOLOGICALS FOR EQUIDAE</b>
QI05A	HORSE
<i>QI05AA</i>	<i>Inactivated viral vaccines</i>
<i>QI05AB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI05AC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI05AD</i>	<i>Live viral vaccines</i>
<i>QI05AE</i>	<i>Live bacterial vaccines</i>
<i>QI05AF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI05AG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI05AH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI05AI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI05AJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI05AK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI05AL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI05AM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI05AN</i>	<i>Live parasitic vaccines</i>
<i>QI05AO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI05AP</i>	<i>Live fungal vaccines</i>
<i>QI05AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI05AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI05AS</i>	<i>Allergens</i>
<i>QI05AT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI05AU</i>	<i>Other live vaccines</i>
<i>QI05AV</i>	<i>Other inactivated vaccines</i>
<i>QI05AX</i>	<i>Other immunologicals</i>

QI05B AZININE/DONKEY

QI05C HYBRIDE

QI05X EQUIDAE, OTHERS

**QI06 IMMUNOLOGICALS FOR FELIDAE**

QI06A CAT

*QI06AA Inactivated viral vaccines*

*QI06AB Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)*

*QI06AC Inactivated bacterial vaccines and antisera*

*QI06AD Live viral vaccines*

*QI06AE Live bacterial vaccines*

*QI06AF Live bacterial and viral vaccines*

*QI06AG Live and inactivated bacterial vaccines*

*QI06AH Live and inactivated viral vaccines*

*QI06AI Live viral and inactivated bacterial vaccines*

*QI06AJ Live and inactivated viral and bacterial vaccines*

*QI06AK Inactivated viral and live bacterial vaccines*

*QI06AL Inactivated viral and inactivated bacterial vaccines*

*QI06AM Antisera, immunoglobulin preparations, and antitoxins*

*QI06AN Live parasitic vaccines*

*QI06AO Inactivated parasitic vaccines*

*QI06AP Live fungal vaccines*

*QI06AQ Inactivated fungal vaccines*

Microsporum vaccines indicated for use in cats and dogs are classified in QI06AQ02.

*QI06AR In vivo diagnostic preparations*

*QI06AS Allergens*

*QI06AT Colostrum preparations and substitutes*

*QI06AU Other live vaccines*

*QI06AV Other inactivated vaccines*

*QI06AX Other immunologicals*

QI06X FELIDAE, OTHERS

**QI07 IMMUNOLOGICALS FOR CANIDAE**

QI07A DOG

*QI07AA Inactivated viral vaccines*

*QI07AB Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)*

*QI07AC Inactivated bacterial vaccines and antisera*

*QI07AD Live viral vaccines*

*QI07AE Live bacterial vaccines*

*QI07AF Live bacterial and viral vaccines*

*QI07AG Live and inactivated bacterial vaccines*

*QI07AH Live and inactivated viral vaccines*

*QI07AI Live viral and inactivated bacterial vaccines*

*QI07AJ Live and inactivated viral and bacterial vaccines*

<i>QI07AK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI07AL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI07AM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI07AN</i>	<i>Live parasitic vaccines</i>
<i>QI07AO</i>	<i>Inactivated parasitic vaccines</i>

Also recombinant vaccines are classified here.

<i>QI07AP</i>	<i>Live fungal vaccines</i>
<i>QI07AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI07AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI07AS</i>	<i>Allergens</i>
<i>QI07AT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI07AU</i>	<i>Other live vaccines</i>
<i>QI07AV</i>	<i>Other inactivated vaccines</i>
<i>QI07AX</i>	<i>Other immunologicals</i>

QI07B	FOX
<i>QI07BA</i>	<i>Inactivated viral vaccines</i>
<i>QI07BB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI07BC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI07BD</i>	<i>Live viral vaccines</i>
<i>QI07BE</i>	<i>Live bacterial vaccines</i>
<i>QI07BF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI07BG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI07BH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI07BI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI07BJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI07BK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI07BL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI07BM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI07BN</i>	<i>Live parasitic vaccines</i>
<i>QI07BO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI07BP</i>	<i>Live fungal vaccines</i>
<i>QI07BQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI07BR</i>	<i>In vivo diagnostic preparations</i>
<i>QI07BS</i>	<i>Allergens</i>
<i>QI07BT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI07BU</i>	<i>Other live vaccines</i>
<i>QI07BV</i>	<i>Other inactivated vaccines</i>
<i>QI07BX</i>	<i>Other immunologicals</i>

QI07X	CANIDAE, OTHERS
<i>QI07XA</i>	<i>Inactivated viral vaccines</i>
<i>QI07XB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI07XC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI07XD</i>	<i>Live viral vaccines</i>
<i>QI07XE</i>	<i>Live bacterial vaccines</i>
<i>QI07XF</i>	<i>Live bacterial and viral vaccines</i>

<i>QI07XG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI07XH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI07XI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI07XJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI07XK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI07XL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI07XM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI07XN</i>	<i>Live parasitic vaccines</i>
<i>QI07XO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI07XP</i>	<i>Live fungal vaccines</i>
<i>QI07XQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI07XR</i>	<i>In vivo diagnostic preparations</i>
<i>QI07XS</i>	<i>Allergens</i>
<i>QI07XT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI07XU</i>	<i>Other live vaccines</i>
<i>QI07XV</i>	<i>Other inactivated vaccines</i>
<i>QI07XX</i>	<i>Other immunologicals</i>

<b>QI08</b>	<b>IMMUNOLOGICALS FOR LEPORIDAE</b>
QI08A	RABBIT
<i>QI08AA</i>	<i>Inactivated viral vaccines</i>
<i>QI08AB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI08AC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI08AD</i>	<i>Live viral vaccines</i>
<i>QI08AE</i>	<i>Live bacterial vaccines</i>
<i>QI08AF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI08AG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI08AH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI08AI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI08AJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI08AK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI08AL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI08AM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI08AN</i>	<i>Live parasitic vaccines</i>
<i>QI08AO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI08AP</i>	<i>Live fungal vaccines</i>
<i>QI08AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI08AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI08AS</i>	<i>Allergens</i>
<i>QI08AT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI08AU</i>	<i>Other live vaccines</i>
<i>QI08AV</i>	<i>Other inactivated vaccines</i>
<i>QI08AX</i>	<i>Other immunologicals</i>
QI08B	HARE
QI08X	LEPORIDAE, OTHERS

QI09	<b>IMMUNOLOGICALS FOR SUIDAE</b>
QI09A	PIG
QI09AA	<i>Inactivated viral vaccines</i>
QI09AB	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
QI09AC	<i>Inactivated bacterial vaccines and antisera</i>
QI09AD	<i>Live viral vaccines</i>
QI09AE	<i>Live bacterial vaccines</i>
QI09AF	<i>Live bacterial and viral vaccines</i>
QI09AG	<i>Live and inactivated bacterial vaccines</i>
QI09AH	<i>Live and inactivated viral vaccines</i>
QI09AI	<i>Live viral and inactivated bacterial vaccines</i>
QI09AJ	<i>Live and inactivated viral and bacterial vaccines</i>
QI09AK	<i>Inactivated viral and live bacterial vaccines</i>
QI09AL	<i>Inactivated viral and inactivated bacterial vaccines</i>
QI09AM	<i>Antisera, immunoglobulin preparations and antitoxins</i>
QI09AN	<i>Live parasitic vaccines</i>
QI09AO	<i>Inactivated parasitic vaccines</i>
QI09AP	<i>Live fungal vaccines</i>
QI09AQ	<i>Inactivated fungal vaccines</i>
QI09AR	<i>In vivo diagnostic preparations</i>
QI09AS	<i>Allergens</i>
QI09AT	<i>Colostrum preparations and substitutes</i>
QI09AU	<i>Other live vaccines</i>
QI09AV	<i>Other inactivated vaccines</i>
QI09AX	<i>Other immunologicals</i>

QI09X SUIDAE, OTHERS

QI10	<b>IMMUNOLOGICALS FOR PISCES</b>
QI10A	ATLANTIC SALMON
QI10AA	<i>Inactivated viral vaccines</i>
QI10AB	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>

Vibrio vaccines indicated for use in Atlantic salmon and rainbow trout are classified in QI10BB01.

QI10AC	<i>Inactivated bacterial vaccines and antisera</i>
QI10AD	<i>Live viral vaccines</i>
QI10AE	<i>Live bacterial vaccines</i>
QI10AF	<i>Live bacterial and viral vaccines</i>
QI10AG	<i>Live and inactivated bacterial vaccines</i>
QI10AH	<i>Live and inactivated viral vaccines</i>
QI10AI	<i>Live viral and inactivated bacterial vaccines</i>
QI10AJ	<i>Live and inactivated viral and bacterial vaccines</i>
QI10AK	<i>Inactivated viral and live bacterial vaccines</i>
QI10AL	<i>Inactivated viral and inactivated bacterial vaccines</i>
QI10AM	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
QI10AN	<i>Live parasitic vaccines</i>
QI10AO	<i>Inactivated parasitic vaccines</i>

<i>QI10AP</i>	<i>Live fungal vaccines</i>
<i>QI10AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI10AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI10AS</i>	<i>Allergens</i>
<i>QI10AU</i>	<i>Other live vaccines</i>
<i>QI10AV</i>	<i>Other inactivated vaccines</i>
<i>QI10AX</i>	<i>Other immunologicals</i>
QI10B	RAINBOW TROUT
<i>QI10BA</i>	<i>Inactivated viral vaccines</i>
<i>QI10BB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
	Vibrio vaccines indicated for use in Atlantic salmon and rainbow trout are classified here.
<i>QI10BC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI10BD</i>	<i>Live viral vaccines</i>
<i>QI10BE</i>	<i>Live bacterial vaccines</i>
<i>QI10BF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI10BG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI10BH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI10BI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI10BJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI10BK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI10BL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI10BM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI10BN</i>	<i>Live parasitic vaccines</i>
<i>QI10BO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI10BP</i>	<i>Live fungal vaccines</i>
<i>QI10BQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI10BR</i>	<i>In vivo diagnostic preparations</i>
<i>QI10BS</i>	<i>Allergens</i>
<i>QI10BU</i>	<i>Other live vaccines</i>
<i>QI10BV</i>	<i>Other inactivated vaccines</i>
<i>QI10BX</i>	<i>Other immunologicals</i>
QI10C	CARP
QI10D	TURBOT
QI10E	ORNAMENTAL FISH
QI10F	ATLANTIC COD
<i>QI10FB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
QI10X	PISCES, OTHERS

QI11	IMMUNOLOGICALS FOR RODENTS
QI11A	RAT
QI11B	MOUSE
QI11C	GUINEA-PIG
QI11X	RODENTS, OTHERS
QI20	IMMUNOLOGICALS FOR OTHER SPECIES
QI20A	RED DEER
<i>QI20AA</i>	<i>Inactivated viral vaccines</i>
<i>QI20AB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI20AC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI20AD</i>	<i>Live viral vaccines</i>
<i>QI20AE</i>	<i>Live bacterial vaccines</i>
<i>QI20AF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI20AG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI20AH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI20AI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI20AJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI20AK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI20AL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI20AM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI20AN</i>	<i>Live parasitic vaccines</i>
<i>QI20AO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI20AP</i>	<i>Live fungal vaccines</i>
<i>QI20AQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI20AR</i>	<i>In vivo diagnostic preparations</i>
<i>QI20AS</i>	<i>Allergens</i>
<i>QI20AT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI20AU</i>	<i>Other live vaccines</i>
<i>QI20AV</i>	<i>Other inactivated vaccines</i>
<i>QI20AX</i>	<i>Other immunologicals</i>
QI20B	REINDEER
QI20C	MINK
<i>QI20CA</i>	<i>Inactivated viral vaccines</i>
<i>QI20CB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI20CC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI20CD</i>	<i>Live viral vaccines</i>
<i>QI20CE</i>	<i>Live bacterial vaccines</i>
<i>QI20CF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI20CG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI20CH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI20CI</i>	<i>Live viral and inactivated bacterial vaccines</i>

<i>QI20CJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI20CK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI20CL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI20CM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI20CN</i>	<i>Live parasitic vaccines</i>
<i>QI20CO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI20CP</i>	<i>Live fungal vaccines</i>
<i>QI20CQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI20CR</i>	<i>In vivo diagnostic preparations</i>
<i>QI20CS</i>	<i>Allergens</i>
<i>QI20CT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI20CU</i>	<i>Other live vaccines</i>
<i>QI20CV</i>	<i>Other inactivated vaccines</i>
<i>QI20CX</i>	<i>Other immunologicals</i>

QI20D	FERRET
<i>QI20DA</i>	<i>Inactivated viral vaccines</i>
<i>QI20DB</i>	<i>Inactivated bacterial vaccines (including mycoplasma, toxoid and chlamydia)</i>
<i>QI20DC</i>	<i>Inactivated bacterial vaccines and antisera</i>
<i>QI20DD</i>	<i>Live viral vaccines</i>
<i>QI20DE</i>	<i>Live bacterial vaccines</i>
<i>QI20DF</i>	<i>Live bacterial and viral vaccines</i>
<i>QI20DG</i>	<i>Live and inactivated bacterial vaccines</i>
<i>QI20DH</i>	<i>Live and inactivated viral vaccines</i>
<i>QI20DI</i>	<i>Live viral and inactivated bacterial vaccines</i>
<i>QI20DJ</i>	<i>Live and inactivated viral and bacterial vaccines</i>
<i>QI20DK</i>	<i>Inactivated viral and live bacterial vaccines</i>
<i>QI20DL</i>	<i>Inactivated viral and inactivated bacterial vaccines</i>
<i>QI20DM</i>	<i>Antisera, immunoglobulin preparations, and antitoxins</i>
<i>QI20DN</i>	<i>Live parasitic vaccines</i>
<i>QI20DO</i>	<i>Inactivated parasitic vaccines</i>
<i>QI20DP</i>	<i>Live fungal vaccines</i>
<i>QI20DQ</i>	<i>Inactivated fungal vaccines</i>
<i>QI20DR</i>	<i>In vivo diagnostic preparations</i>
<i>QI20DS</i>	<i>Allergens</i>
<i>QI20DT</i>	<i>Colostrum preparations and substitutes</i>
<i>QI20DU</i>	<i>Other live vaccines</i>
<i>QI20DV</i>	<i>Other inactivated vaccines</i>
<i>QI20DX</i>	<i>Other immunologicals</i>

QI20E SNAKE

QI20F BEE

QI20X OTHERS

*QI20XE* *Live bacterial vaccines*

**QJ            ANTIINFECTIVES FOR SYSTEMIC USE**

**QJ01        ANTIBACTERIALS FOR SYSTEMIC USE**

- A    *Tetracyclines*
- B    *Amphenicols*
- C    *Beta-lactam antibacterials, penicillins*
- D    *Other beta-lactam antibacterials*
- E    *Sulfonamides and trimethoprim*
- F    *Macrolides, lincosamides and streptogramins*
- G    *Aminoglycoside antibacterials*
- M    *Quinolone and quinoxaline antibacterials*
- R    *Combinations of antibacterials*
- X    *Other antibacterials*

**QJ02        ANTIMYCOTICS FOR SYSTEMIC USE**

- A    *Antimycotics for systemic use*

**QJ04        ANTIMYCOBACTERIALS**

- A    *Drugs for treatment of tuberculosis*
- B    *Drugs for treatment of lepra*

**QJ05        ANTIVIRALS FOR SYSTEMIC USE**

- A    *Direct acting antivirals*

**QJ51        ANTIBACTERIALS FOR INTRAMAMMARY USE**

- A    *Tetracyclines for intramammary use*
- B    *Amphenicols for intramammary use*
- C    *Beta-lactam antibacterials, penicillins, for intramammary use*
- D    *Other beta-lactam antibacterials for intramammary use*
- E    *Sulfonamides and trimethoprim for intramammary use*
- F    *Macrolides and lincosamides for intramammary use*
- G    *Aminoglycoside antibacterials for intramammary use*
- R    *Combinations of antibacterials for intramammary use*
- X    *Other antibacterials for intramammary use*

**QJ54        ANTIMYCOBACTERIALS FOR INTRAMAMMARY USE**

- A    *Drugs for mycobacterial infections*

**QJ**

## **ANTIINFECTIVES FOR SYSTEMIC USE**

Group QJ comprises antiinfectives for systemic use, although antiinfectives for local use are classified in other groups as well. Gynecological antiinfectives, for example, are classified in QG - *Genito urinary system and sex hormones*, and intestinal antiinfectives are classified in QA - *Alimentary tract and metabolism*. One active substance might have several ATCvet codes, depending on the formulation considered.

In the ATC system for human medicines, immune sera and immunoglobulins are classified in J06 and vaccines are classified in J07. In the ATCvet system, however, vaccines, immune sera and immunoglobulins are classified in QI - *Immunologicals*.

The group QJ comprises two 2nd level groups specific to the ATCvet system, QJ51 - *Antibacterials for intramammary use* and QJ54 - *Antimycobacterials for intramammary use*.

Systemically administered antibacterials and antimycotics may also be classified in other groups if their target is exclusively local, e.g:

- QA01AB - *Antiinfectives and antiseptics for local oral treatment*
- QA07A - *Intestinal antiinfectives*
- QD01 - *Antifungals for dermatological use*
- QD06 - *Antibiotics and chemotherapeutics for dermatological use*
- QD07C - *Corticosteroids, combinations with antibiotics*
- QD09AA - *Ointment dressings with antiinfectives*
- QG01 - *Gynecological antiinfectives and antiseptics*
- QG51 - *Antiinfectives and antiseptics for intrauterine use*
- QP - *Antiparasitic products, insecticides and repellants*
- QR02AB - *Throat preparations, Antibiotics*
- QR05X - *Other cold preparations*
- QS - *Sensory organs*

**QJ01**

### **ANTIBACTERIALS FOR SYSTEMIC USE**

Antibacterials for systemic use, apart from antimycobacterials which are classified in QJ04 and QJ54, should be classified in this group. They are classified according to their mode of action and their chemistry.

Combinations of two or more systemic antibacterials from different 3rd level groups are classified in QJ01R, with the exception of combinations of sulfonamides and trimethoprim, including derivatives, which are classified in a separate 4th level group, QJ01EW. Combinations of antibacterials with other substances are classified in QJ01RV.

Inhaled antiinfectives are classified here.

Combinations of antibacterials and tuberculostatics are classified in QJ04AM.

QJ01A TETRACYCLINES

***QJ01AA Tetracyclines***

Tetracycline antibacterials, which inhibit the bacterial protein synthesis through binding to the 30-S part of ribosomes, are classified in this group

At the plain ATC 5<sup>th</sup> levels in this group combination with e.g. mucolytics are allowed.

QJ01B AMPHENICOLS

***QJ01BA Amphenicols***

Amphenicol antibacterials, which inhibit the bacterial protein synthesis, are classified in this group.

QJ01C BETA-LACTAM ANTIBACTERIALS, PENICILLINS

Penicillin beta-lactam antibacterials, which inhibit the bacterial cell wall synthesis, are classified in this group. Combinations of penicillins from different 4th level groups, including beta-lactamase inhibitors, are classified in QJ01CR.

***QJ01CA Penicillins with extended spectrum***

Penicillins with enhanced activity against Gram-negative rods, e.g. ampicillin and similar antibiotics, are classified in this group.

***QJ01CE Beta-lactamase sensitive penicillins***

***QJ01CF Beta-lactamase resistant penicillins***

***QJ01CG Beta-lactamase inhibitors***

***QJ01CR Combinations of penicillins, incl. beta-lactamase inhibitors***

Combinations of penicillins and/or beta-lactamase inhibitors are classified in this group. Combinations containing one penicillin and an enzyme inhibitor are assigned to different 5th level groups according to the penicillin involved.

Combinations of two or more penicillins with or without an enzyme inhibitor, are classified in a separate 5th level group, QJ01CR50 - *combinations of penicillins*.

QJ01D OTHER BETA-LACTAM ANTIBACTERIALS

Beta-lactam antibacterials other than penicillins are classified in this group.

The cephalosporins are classified into subgroups according to generations. The reference applied when defining generations is "Principles and Practice of Infectious Diseases" by Mandell, Douglas and Bennett, sixth edition, 2005. For the definitions used in this textbook, see under QJ01DB, QJ01DC, QJ01DD and QJ01DE.

Combinations with beta-lactamase inhibitors are classified by using the 50-series.

***QJ01DB First-generation cephalosporins***

The first-generation compounds have relatively narrow spectrum of activity focused primarily on the gram-positive cocci.

***QJ01DC Second-generation cephalosporins***

The second-generation cephalosporins have a variable activity against gram-positive cocci but have increased activity against gram-negative bacteria. The cephemycin group is included here.

***QJ01DD Third-generation cephalosporins***

The third-generation cephalosporins have a marked activity against gram-negative bacteria. Limited activity against gram-positive cocci, particularly methicillin susceptible *S. aureus*, might occur.

Combinations with NSAIDs are classified in QJ01DD99.

***QJ01DE Fourth-generation cephalosporins***

The fourth-generation cephalosporins have activity against gram-positive cocci and a broad array of gram-negative bacteria, including *P. aeruginosa* and many of the Enterobacteriaceae with inducible chromosomal b-lactamases.

***QJ01DF Monobactams***

Arginin and lysine salts of aztreonam are classified in QJ01DF01; thus aztreonam for inhalation is classified together with systemic formulations.

***QJ01DH Carbapenems***

***QJ01DI Other cephalosporins and penems***

***QJ01E SULFONAMIDES AND TRIMETHOPRIM***

Sulfonamides and trimethoprim are classified differently in the ATCvet system, compared with the ATC system, owing to differences in their pharmacokinetics and metabolism in animals, compared with humans.

Systemic sulfonamides and trimethoprim and/or derivatives are classified in this group.

Combinations of sulfonamide and trimethoprim, and/or derivatives, are classified in QJ01EW. Preparations containing two or more sulfonamides are classified using the 5th level code 30. Sulfonamides combined with other antibacterials (excluding trimethoprim and analogues) are classified in QJ01R - *Combinations of antibacterials*. See also QA07A - *Intestinal antiinfectives*.

***QJ01EA Trimethoprim and derivatives***

***QJ01EQ Sulfonamides***

Sulfonamides indicated in treatment of paracitic infections are classified in QP51AG - *Sulfonamides, plain and in combinations*.

Combination products should be classified in separate 5th level groups using the corresponding 50 series except for combinations with trimethoprim and derivatives which are classified in QJ01EW. Combinations of two or more sulfonamides should be classified using the 5th level code 30.

Oral antiinfectives, which have no systemic effect, are classified in QA07A.

***QJ01EW Combinations of sulfonamides and trimethoprim, incl. derivatives***

Combinations with trimethoprim, including derivatives, are classified in the same 5th level group according to the sulfonamide. Combinations of two or more sulfonamides and trimethoprim, incl. derivatives, should be classified using the 5th level code 30.

**QJ01F MACROLIDES, LINCOSAMIDES AND STREPTOGRAMINS**

Macrolide, lincosamide and streptogramin antibacterials inhibiting bacterial protein synthesis through binding to the 50-S part of the ribosomes are classified in this group.

***QJ01FA Macrolides***

Macrolides in combination with NSAIDs are also classified here.

***QJ01FF Lincosamides***

***QJ01FG Streptogramins***

The streptogramin components dalfopristin/quinupristin are semisynthetic derivates of pristinamycin. The two components have synergistic antibacterial effect and are always used together. Quinupristin/dalfopristin are therefore classified at the ATCvet plain level QJ01FG02.

**QJ01G AMINOGLYCOSIDE ANTIBACTERIALS**

Aminoglycoside antibacterials which disturb the bacterial protein synthesis through binding to the 30-S part of the ribosomes, are classified in this group.

***QJ01GA Streptomycins***

***QJ01GB Other aminoglycosides***

**QJ01M QUINOLONE AND QUINOXALINE ANTIBACTERIALS**

Quinolone antibacterials, which inhibit the bacterial DNA-gyrase, should be classified in this group.

***QJ01MA Fluoroquinolones***

Flumequine is classified in QJ01MB.

***QJ01MB Other quinolones***

**QJ01MQ Quinoxalines**

This group does not appear in the ATC human system.

**QJ01R COMBINATIONS OF ANTIBACTERIALS**

The detailed classification of some of the antibacterial combinations in QJ01RA is based on the general concern with the use of antibacterials worldwide and the need for drug monitoring, incl. mapping of the use with resistance patterns.

**QJ01RA *Combinations of antibacterials***

Combinations of two or more antibacterials for systemic use from different ATCvet 3rd level groups are classified in this group.

Combinations of urinary antiseptics and antiinfectives are classified here.

Fixed combination of two or more antibacterials should be classified in the specific veterinary 90-codes according to the following ranking:

1. quinolones
2. cephalosporins
3. macrolides
4. polymyxines
5. penicillins
6. aminoglycosides
7. tetracyclines
8. amphenicols
9. lincosamides
10. sulfonamides

**QJ01RV *Combinations of antibacterials and other substances***

This group does not appear in the ATC human system.

Combinations of two or more antibacterials for systemic use and other substances are classified in this group, e.g. antibacterials and corticosteroids.

**QJ01X OTHER ANTIBACTERIALS**

Antibacterials with various modes of action not classified in the preceding groups are assigned to this group.

**QJ01XA *Glycopeptide antibacterials***

Glycopeptide antibacterials, which inhibit the cell wall synthesis of Gram-positive bacteria, are classified in this group.

Vancomycin e.g. is classified in this group. However, oral formulations containing vancomycin are classified in QA07A - *Intestinal antiinfectives*.

**QJ01XB *Polymyxins***

Polymyxin antibacterials acting on the bacterial cytoplasm membrane are classified in this group.

Oral products containing colistin are classified in QA07 - *Antidiarrheals, intestinal antiinflammatory/antiinfective agents*.

**QJ01XC** ***Steroid antibacterials***

Steroid antibacterials, which inhibit the binding of bacterial transfer-RNA and the 50-S part of the ribosomes, are classified in this group.

**QJ01XD** ***Imidazole derivatives***

Imidazole antibacterials acting through active metabolites in anaerobic bacteria should be classified in this group.

Only formulations for parenteral use of e.g. metronidazole are classified in this group.

Oral formulations of imidazole derivatives are classified in QP51 - *Antiprotozoals*, and formulations for gynecological/urinary use are classified in QG01 - *Gynecological antiinfectives and antiseptics* and QG51 - *Antiinfectives and antiseptics for intrauterine use*.

**QJ01XE** ***Nitrofuran derivatives***

Nitrofurantoin in combination with phenazopyridine is classified in QJ01XE51.

**QJ01XQ** ***Pleuromutilins***

This group does not appear in the ATC human system.

**QJ01XX** ***Other antibacterials***

Fumagillin is classified in QP51AX.

Combinations of procaine benzylpenicillin and novobiocin are classified in QJ51RC23.

**QJ02** ***ANTIMYCOTICS FOR SYSTEMIC USE***

**QJ02A** ***ANTIMYCOTICS FOR SYSTEMIC USE***

This group does not include antimycotics specifically for dermatological use, even if they are administered systemically. Griseofulvin, for example, see QD01 - *Antifungals for dermatological use*.

Antimycotics can also be classified in the following groups:

QA01AB - *Antiinfectives and antiseptics for local oral treatment*

QA07A - *Intestinal antiinfectives*

QD01 - *Antifungals for dermatological use*

QG01 - *Gynecological antiinfectives and antiseptics*

**QJ02AA** ***Antibiotics***

Pharmaceutical formulations of ketoconazole solely indicated for the treatment of Cushing's syndrome are classified in QH02CA - Anticorticosteroids.

**QJ02AB** ***Imidazole derivatives***

**QJ02AC** ***Triazole and tetrazole derivatives***

**QJ02AX Other antimycotics for systemic use**

**QJ04 ANTIMYCOBACTERIALS**

In the ATC system, J04 is a group in which products used to treat tuberculosis and leprosy in humans are classified.

In veterinary medicine, however, the products classified in QJ04 are used for the treatment of diseases caused by other mycobacteria.

Drugs for mycobacterial infections are classified in QJ04A - *Drugs for the treatment of tuberculosis*. However, streptomycins are classified in QJ01G - *Aminoglycoside antibacterials*. Antimycobacterials for intramammary use should be assigned to QJ54.

**QJ04A DRUGS FOR THE TREATMENT OF TUBERCULOSIS**

***QJ04AA Aminosalicylic acid and derivatives***

***QJ04AB Antibiotics***

***QJ04AC Hydrazides***

***QJ04AD Thiocarbamide derivatives***

***QJ04AK Other drugs for treatment of tuberculosis***

***QJ04AM Combinations of drugs for treatment of tuberculosis***

**QJ04B DRUGS FOR THE TREATMENT OF LEPRA**

***QJ04BA Drugs for treatment of lepra***

**QJ05 ANTIVIRALS FOR SYSTEMIC USE**

This group comprises specific antiviral agents, excl. vaccines.

Antivirals for dermatological use, see QD06BB.

Antivirals for ophtalmological use, see QS01A - *Antiinfectives*.

Combinations with vitamins are allowed.

**QJ05A DIRECT ACTING ANTIVIRALS**

This group comprises agents acting directly on the virus.

***QJ05AA Thiosemicbazones***

***QJ05AB Nucleosides and nucleotides excl. reverse transcriptase inhibitors***

Ribavirin is classified in QJ05AP.

The combinations of ribavirin and peginterferon alfa-2a or peginterferon alfa-2b are classified in QL03AB.

***QJ05AC Cyclic amines***

Amantadine is classified in QN04 - *Anti-parkinson drugs*.

***QJ05AD Phosphonic acid derivatives***

**QJ05AE** *Protease inhibitors*

**QJ05AF** *Nucleoside and nucleotide reverse transcriptase inhibitors*

**QJ05AG** *Non-nucleoside reverse transcriptase inhibitors*

**QJ05AH** *Neuraminidase inhibitors*

All neuraminidase inhibitors are classified here, regardless of formulation.

**QJ05AJ** *Integrase inhibitors*

**QJ05AP** *Antivirals for treatment of HCV infections*

This group includes both single substances and combinations.

**QJ05AR** *Antivirals for treatment of HIV infections, combinations*

Combinations with pharmacokinetic enhancers are classified in this group, regardless of their antiviral effect. Plain products with cobicistat are classified in QV03AX.

**QJ05AX** *Other antivirals*

## **QJ51** ANTIBACTERIALS FOR INTRAMAMMARY USE

Antibacterials for intramammary use should be classified in this group using the same 3rd level codes as the corresponding antibacterials in group QJ01.

Antimycobacterials for intramammary use are classified in QJ54.

Combinations of two or more antibacterials from different 3rd level groups for intramammary use are classified in QJ51R.

Combinations of antibacterials and other substances for intramammary use should be classified in QJ51RV.

**QJ51A** TETRACYCLINES FOR INTRAMAMMARY USE

**QJ51AA** *Tetracyclines*

**QJ51B** AMPHENICOLS FOR INTRAMAMMARY USE

**QJ51BA** *Amphenicols*

**QJ51C** BETA-LACTAM ANTIBACTERIALS, PENICILLINS FOR INTRAMAMMARY USE

**QJ51CA** *Penicillins with extended spectrum*

Penicillins with enhanced activity against Gram-negative rods e.g. ampicillin and similar antibiotics, are classified in this group.

**QJ51CE** *Beta-lactamase sensitive penicillins*

Phenetamate, for example, is classified in this group.

**QJ51CF** *Beta-lactamase resistant penicillins*

Cloxacillin, for example, is classified in this group.

**QJ51CR** *Combinations of penicillins and/or beta-lactamase inhibitors*

Combinations of two or more penicillins with or without an enzyme inhibitor, are classified in a separate 5th level group, QJ51CR50.

**QJ51D** OTHER BETA-LACTAM ANTIBACTERIALS FOR INTRAMAMMARY USE

**QJ51DB** *First-generation cephalosporins*

**QJ51DC** *Second-generation cephalosporins*

**QJ51DD** *Third-generation cephalosporins*

**QJ51DE** *Fourth-generation cephalosporins*

**QJ51E** SULFONAMIDES AND TRIMETHOPRIM FOR INTRAMAMMARY USE

**QJ51EA** *Trimethoprim and derivatives*

**QJ51F** MACROLIDES AND LINCOSAMIDES FOR INTRAMAMMARY USE

**QJ51FA** *Macrolides*

Erythromycin and spiramycin are classified in this group.

**QJ51FF** *Lincosamides*

Pirlimycin is classified in this group.

**QJ51G** AMINOGLYCOSIDE ANTIBACTERIALS FOR INTRAMAMMARY USE

**QJ51GA** *Streptomycins*

**QJ51GB** *Other aminoglycosides*

Gentamicin, for example, is classified in this group.

**QJ51R** COMBINATIONS OF ANTIBACTERIALS FOR INTRAMAMMARY USE

Combinations of antibacterials for intramammary use are classified in this group. The 4th level group corresponds to the 3rd level group in QJ01 and QJ51, which is also used for a ranking of the combinations. A combination of amphenicols and penicillins, for example, is classified in QJ51RB.

**QJ51RA** *Tetracyclines, combinations with other antibacterials*

**QJ51RB** *Amphenicols, combinations with other antibacterials*

**QJ51RC** *Beta-lactam antibacterials, penicillins, combinations with other antibacterials*

Combinations of procaine benzylpenicillin and novobiocin are classified in QJ51RC23.

**QJ51RD** *Other beta-lactam antibacterials, combinations with other antibacterials*

Cephalosporins and related substances, for example, are classified in this group.

**QJ51RE** *Sulfonamides and trimethoprim incl. derivatives*

**QJ51RF** *Macrolides and lincosamides, combinations with other substances*

**QJ51RG** *Aminoglycoside antibacterials, combinations*

**QJ51RV    *Combinations of antibacterials and other substances***

This group does not appear in the ATC human system.

Antibacterials and corticosteroids are classified in this group.

**QJ51X    OTHER ANTIBACTERIALS FOR INTRAMAMMARY USE**

Antibacterials with various modes of action not classified in the preceding groups are assigned to this group.

The ATCvet 5th level numbers follows the numbering of the substances in QJ01D.

**QJ51XB    *Polymyxins***

Polymyxin antibacterials acting on the bacterial cytoplasma membrane are classified in this group.

**QJ51XX    *Other antibacterials for intramammary use***

**QJ54    ANTIMYCOBACTERIALS FOR INTRAMAMMARY USE**

Antimycobacterials for intramammary use should be classified in this group.

**QJ54A    DRUGS FOR MYCOBACTERIAL INFECTIONS**

**QJ54AB    *Antibiotics***

**QL            ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS**

**QL01    ANTINEOPLASTIC AGENTS**

- A    *Alkylating agents*
- B    *Antimetabolites*
- C    *Plant alkaloids and other natural products*
- D    *Cytotoxic antibiotics and related substances*
- E    *Protein kinase inhibitors*
- F    *Monoclonal antibodies and antibody drug conjugates*
- X    *Other antineoplastic agents*

**QL02    ENDOCRINE THERAPY**

- A    *Hormones and related agents*
- B    *Hormone antagonists and related agents*

**QL03    IMMUNOSTIMULANTS**

- A    *Immunostimulants*

**QL04    IMMUNOSUPPRESSANTS**

- A    *Immunosuppressants*

## QL ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS

The group QL comprises preparations, e.g. alkylating agents, antimetabolites, plant alkaloids and cytotoxic antibiotics, used in the treatment of neoplastic diseases. Immunomodulating agents, both stimulating and suppressive agents, are also classified here.

Hormonal preparations specifically used in the treatment of neoplastic diseases should be classified in this group. Note that group QG03 - *Sex hormones and modulators of the genital system* might include the same hormone, but of a different strength. Gonadotropin-releasing hormone (GnRH) and analogues not used for endocrine therapy related to neoplastic diseases are classified in QH01CA - *Gonadotropin-releasing hormones*.

### QL01 ANTINEOPLASTIC AGENTS

Combination preparations are classified in QL01XY. Detoxifying agents used in connection with high-dose treatment with antineoplastic agents are classified in QV03AF - *Detoxifying agents for antineoplastic treatment*.

#### QL01A ALKYLATING AGENTS

**QL01AA** *Nitrogen mustard analogues*

**QL01AB** *Alkyl sulphonates*

**QL01AC** *Ethylene imines*

**QL01AD** *Nitrosoureas*

**QL01AG** *Epoxides*

**QL01AX** *Other alkylating agents*

#### QL01B ANTIMETABOLITES

**QL01BA** *Folic acid analogues*

Oral formulations and pre-filled syringe/pen of methotrexate for use in non-cancer indications are classified in QL04AX03.

**QL01BB** *Purine analogues*

Parenteral formulations of cladribine used in cancer are classified in this group, while oral formulations for multiple sclerosis are classified in QL04AA.

**QL01BC** *Pyrimidine analogues*

#### QL01C PLANT ALKALOIDS AND OTHER NATURAL PRODUCTS

**QL01CA** *Vinca alkaloids and analogues*

Synthetic analogues are also classified in this group.

**QL01CB** *Podophyllotoxin derivatives*

Antivirals for topical use, e.g. aciclovir and podophyllotoxin, see QD06 - *Antibiotics and chemotherapeutics for dermatological use*.

**QL01CC** *Colchicine derivatives*

<b>QL01CD</b>	<b><i>Taxanes</i></b>
<b>QL01CE</b>	<b><i>Topoisomerase 1 (TOP1) inhibitors</i></b>
	All formulations of irinotecan (e.g. liposomal) are classified in QL01CE02.
<b>QL01CX</b>	<b><i>Other plant alkaloids and natural products</i></b>
QL01D	CYTOTOXIC ANTIBIOTICS AND RELATED SUBSTANCES
<b>QL01DA</b>	<b><i>Actinomycines</i></b>
<b>QL01DB</b>	<b><i>Anthracyclines and related substances</i></b>
<b>QL01DC</b>	<b><i>Other cytotoxic antibiotics</i></b>
QL01E	PROTEIN KINASE INHIBITORS
	This group comprises protein kinase inhibitors used in the treatment of cancer. Substances are classified according to their main target.
	Substances which are multi-targeted without a clear main target are classified in QL01EX.
	Lipid kinase inhibitors (phosphatidylinositol-3-kinase (Pi3K) inhibitors) are classified in QL01EM.
<b>QL01EA</b>	<b><i>BCR-ABL tyrosine kinase inhibitors</i></b>
<b>QL01EB</b>	<b><i>Epidermal growth factor receptor (EGFR) tyrosine kinase inhibitors</i></b>
	Substances inhibiting both HER2 and EGFR indicated for breast cancer are classified in QL01EH.
<b>QL01EC</b>	<b><i>B-Raf serine-threonine kinase (BRAF) inhibitors</i></b>
<b>QL01ED</b>	<b><i>Anaplastic lymphoma kinase (ALK) inhibitors</i></b>
	Substances which are multi-targeted, but where ALK is considered the main target, are classified in this group
<b>QL01EE</b>	<b><i>Mitogen-activated protein kinase (MEK) inhibitors</i></b>
<b>QL01EF</b>	<b><i>Cyclin-dependent kinase (CDK) inhibitors</i></b>
<b>QL01EG</b>	<b><i>Mammalian target of rapamycin (mTOR) kinase inhibitors</i></b>
<b>QL01EH</b>	<b><i>Human epidermal growth factor receptor 2 (HER2) tyrosine kinase inhibitors</i></b>
	Substances inhibiting both HER2 and EGFR indicated for breast cancer are classified in this group.
<b>QL01EJ</b>	<b><i>Janus-associated kinase (JAK) inhibitors</i></b>
<b>QL01EK</b>	<b><i>Vascular endothelial growth factor receptor (VEGFR) tyrosine kinase inhibitors</i></b>
<b>QL01EL</b>	<b><i>Bruton's tyrosine kinase (BTK) inhibitors</i></b>
<b>QL01EM</b>	<b><i>Phosphatidylinositol-3-kinase (Pi3K) inhibitors</i></b>
<b>QL01EN</b>	<b><i>Fibroblast growth factor receptor (FGFR) tyrosine kinase inhibitors</i></b>

**QL01EX Other protein kinase inhibitors**

This group comprises other protein kinase inhibitors which cannot be classified in the preceding groups. Substances which are multi-targeted without a clear main target are also classified in this group.

**QL01F MONOCLONAL ANTIBODIES AND ANTIBODY DRUG CONJUGATES**

Monoclonal antibodies mainly indicated for the treatment of cancer are classified in this group.

***QL01FA CD20 (Clusters of Differentiation 20) inhibitors***

***QL01FB CD22 (Clusters of Differentiation 22) inhibitors***

***QL01FC CD38 (Clusters of Differentiation 38) inhibitors***

***QL01FD HER2 (Human Epidermal Growth Factor Receptor 2) inhibitors***

***L01FE EGFR (Epidermal Growth Factor Receptor) inhibitors***

***L01FF PD-1/PDL-1 (Programmed cell death protein 1/death ligand 1) inhibitors***

***L01FG VEGF/VEGFR (Vascular Endothelial Growth Factor) inhibitors***

***L01FX Other monoclonal antibodies and antibody drug conjugates***

**QL01X OTHER ANTINEOPLASTIC AGENTS**

Antineoplastic agents which cannot be classified in the preceding groups should be assigned to this group.

***QL01XA Platinum compounds***

***QL01XB Methylhydrazines***

***QL01XD Sensitizers used in photodynamic/radiation therapy***

***QL01XF Retinoids for cancer treatment***

***QL01XG Proteasome inhibitors***

***QL01XH Histone deacetylase (HDAC) inhibitors***

***QL01XJ Hedgehog pathway inhibitors***

***QL01XK Poly (ADP-ribose) polymerase (PARP) inhibitors***

***QL01XX Other antineoplastic agents***

The 50-series codes are used for single substances due to lack of numbers.

Phosphatidylinositol-3-kinase (Pi3K) inhibitors are classified in QL01EM.

***QL01XY Combinations of antineoplastic agents***

All combinations of antineoplastic agents in QL01 should be classified in this group.

**QL02 ENDOCRINE THERAPY**

Estrogens and progestogens used specifically in the treatment of neoplastic diseases should be classified in this group. This means that some strength might be assigned to this group, while other strengths would be classified in QG03 - *Sex hormones and modulators of the genital system*.

**QL02A HORMONES AND RELATED AGENTS*****QL02AA Estrogens******QL02AB Progestogens******QL02AE Gonadotropin releasing hormone analogues***

Buserelin is classified here in the ATC system. ATCvet products are classified in QH01CA.

***QL02AX Other hormones*****QL02B HORMONE ANTAGONISTS AND RELATED AGENTS*****QL02BA Anti-estrogens******QL02BB Anti-androgens******QL02BG Aromatase inhibitors******QL02BX Other hormone antagonists and related agents*****QL03 IMMUNOMOSTIMULANTS****QL03A IMMUNOSTIMULANTS**

Levamisole, which also affects the immune response, is classified in QP52 - *Anthelmintics*.

***QL03AA Colony stimulating factors******QL03AB Interferons***

Peginterferon alfa-2b in combination with ribavirin and peginterferon alfa-2a in combination with ribavirin are classified in QL03AB60 and QL03AB61, respectively.

***QL03AC Interleukins******QL03AX Other immunostimulants***

Immunostimulating agents used exclusively in veterinary medicine are classified in QI - *Immunologicals*.

**QL04 IMMUNOSUPPRESSANTS**

Immunosuppressive agents are defined as agents that completely or partly suppress one or more factors in the immunosystem.

**QL04A IMMUNOSUPPRESSANTS**

Immunosuppressive agents should be classified in this group, with the exception of corticosteroids, which are classified in QH02.

Immunosuppressive agents indicated for treatment of dermatitis and pruritus should be classified in QD11AX.

**QL04AA *Selective immunosuppressants***

Oral formulations of cladribine used in multiple sclerosis are classified in this group, while parenteral formulations for cancer are classified in QL01BB.

**QL04AB *Tumor necrosis factor alpha (TNF- $\alpha$ ) inhibitors***

**QL04AC *Interleukin inhibitors***

Interleukin inhibitors used in asthma are classified in QR03DX.

Dupilumab is classified in QD11AH.

**QL04AD *Calcineurin inhibitors***

**QL04AX *Other immunosuppressants***

Immunosuppressive agents which cannot be placed in the preceding groups should be classified in this group. Cyclosporin, which is used topically in keratoconjunctivitis sicca, is classified in QS01 - *Ophthalmologicals*.

Oral formulations and prefilled syringe/pen of methotrexate are classified in this group. Parenteral formulations used in cancer are classified in QL01BA01.

**QM        MUSCULO-SKELETAL SYSTEM**

**QM01    ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS**

- A    *Antiinflammatory and antirheumatic products, non-steroids*
- B    *Antiinflammatory/antirheumatic agents in combination*
- C    *Specific antirheumatic agents*

**QM02    TOPICAL PRODUCTS FOR JOINT AND MUSCULAR PAIN**

- A    *Topical products for joint and muscular pain*

**QM03    MUSCLE RELAXANTS**

- A    *Muscle relaxants, peripherally acting agents*
- B    *Muscle relaxants, centrally acting agents*
- C    *Muscle relaxants, directly acting agents*

**QM04    ANTIGOUT PREPARATIONS**

- A    *Antigout preparations*

**QM05    DRUGS FOR TREATMENT OF BONE DISEASES**

- B    *Drugs affecting bone structure and mineralization*

**QM09    OTHER DRUGS FOR DISORDERS OF THE MUSCULO-SKELETAL SYSTEM**

- A    *Other drugs for disorders of the musculo-skeletal system*

## QM MUSCULO-SKELETAL SYSTEM

Preparations used for treatment of disease in or symptoms of the musculo-skeletal system can be classified in this group. Exceptions to this rule are listed under each subgroup and cross-references to common agents and their classification group are stated where appropriate. Many drugs classified in this group, such as the antiinflammatory agents, commonly affect other organs as well. Included are both topical products and products for systemic use. Corticosteroids for systemic use are, with the exception of combinations with some antiinflammatory drugs, classified in QH02 - *Corticosteroids for systemic use*.

### QM01 ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS

#### QM01A ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS, NON-STEROIDS

Antiinflammatory and antirheumatic preparations for systemic use should be classified in this group.

Corticosteroids, see QH02 - *Corticosteroids for systemic use*. All products containing salicylic acid and derivatives are classified in QN02BA - *Salicylic acid derivatives*, with the exception of: salicylates in combination with corticosteroids, which are classified in QM01B - *Antiinflammatory/antirheumatic agents in combination*.

Combinations with muscle relaxants are classified in QM03B.

Combinations with antibacterials are classified in QJ01.

NSAIDs in combination with paracetamol are classified in QN02BE.

Combinations of antiinflammatory agents (e.g. corticosteroids) are classified in QM01B - *Antiinflammatory/antirheumatic agents in combination*.

Antiinflammatory or antirheumatic agents in combination with opioids are classified in QN02AJ - *Opioids in combination with non-opioid analgesics*. Other combinations are classified at separate 5th levels using the corresponding 50-series.

NSAIDs in combination with macrolides are classified in QJ01FA.

#### QM01AA *Butylpyrazolidines*

#### QM01AB *Acetic acid derivatives and related substances*

#### QM01AC *Oxicams*

#### QM01AE *Propionic acid derivatives*

All plain propionic acid derivatives are classified in this group, even if they are only intended for use as pain relief.

Combination of ibuprofen and paracetamol are classified in QN02BE51.

Ibuprofen lysine is classified at the same 5th level as ibuprofen.

#### QM01AG *Fenamates*

**QM01AH Coxibs**

**QM01AX Other antiinflammatory and antirheumatic agents, non-steroids**

Antiinflammatory drugs which cannot be classified in the preceding groups should be assigned to this group. Glucuronoxylan sulfate is classified in the same ATCvet 5th level as pentosane polysulfate.

**QM01B ANTIINFLAMMATORY/ANTIRHEUMATIC AGENTS IN COMBINATION**

**QM01BA Antiinflammatory/antirheumatic agents in combination with corticosteroids**

Antiinflammatory drugs in combination with corticosteroids should be classified in this group.

Combinations with salicylic acid derivatives are classified in this group. The preparations are classified at the 5th level according to the antiinflammatory component. In each 5th level group, different corticosteroids may occur.

**QM01BX Other antiinflammatory/antirheumatic agents in combination with other drugs**

All combinations of different antiinflammatory agents (excluding corticosteroids) are classified in this group.

**QM01C SPECIFIC ANTIRHEUMATIC AGENTS**

**QM01CA Quinolines**

**QM01CB Gold preparations**

**QM01CC Penicillamine and similar agents**

**QM01CX Other specific antirheumatic agents**

**QM02 TOPICAL PRODUCTS FOR JOINT AND MUSCULAR PAIN**

**QM02A TOPICAL PRODUCTS FOR JOINT AND MUSCULAR PAIN**

Ointments, liniments, plasters etc. which may produce symptomatic relief in joint and muscular pain should be classified in this group.

**QM02AA Antiinflammatory preparations, non-steroids for topical use**

All non-steroidal antiinflammatory derivatives for topical use are classified here, regardless of indication.

Combinations of non-steroidal antiinflammatory derivatives and other products for topical use are classified together with plain products in different 5th level groups.

**QM02AB Capsaicin and similar agents**

**QM02AC Preparations with salicylic acid derivatives**

No separate 5th level codes have been established in this group

**QM02AQ Blistering agents**

No separate 5th level codes have been established in this group.

**QM02AX Other topical products for joint and muscular pain**

Topical preparations, which cannot be classified in the preceding groups, should be assigned to this group. Combinations of prednisolone, lidocaine and dimethyl sulfoxide are classified in M02AX99 combinations.

**QM03 MUSCLE RELAXANTS**

Peripherally, centrally and directly acting muscle relaxants should be classified in this group. Urinary antispasmodics are classified in QG04BD - *Drugs for urinary frequency and incontinence*.

**QM03A MUSCLE RELAXANTS, PERIPHERALLY ACTING AGENTS**

Peripherally acting muscle relaxants such as curare alkaloids and suxamethonium should be classified in this group. The drugs in this group are mainly used together with anesthetics.

**QM03AA *Curare alkaloids***

**QM03AB *Choline derivatives***

**QM03AC *Other quaternary ammonium compounds***

Sugammadex indicated for reversal of neuromuscular blockade induced by rocuronium or vecuronium is classified in QV03AB - *Antidotes*.

**QM03AX *Other muscle relaxants, peripherally acting agents***

**QM03B MUSCLE RELAXANTS, CENTRALLY ACTING AGENTS**

The group is subdivided according to chemical structure.

Combinations with NSAIDs (QM01A), analgesics (QN02B) or corticosteroids (H02A) are classified here.

**QM03BA *Carbamic acid esters***

**QM03BB *Oxazol, thiazine, and triazine derivatives***

**QM03BC *Ethers, chemically close to antihistamines***

Orphenadrine citrate is classified here. Preparations containing orphenadrine chloride are classified in QN04AB - *Ethers, chemically close to antihistamines*. Combinations with e.g. paracetamol are classified in this group at separate 5th levels by using the 50-series.

**QM03BX *Other centrally acting agents***

**QM03C MUSCLE RELAXANTS, DIRECTLY ACTING AGENTS**

**QM03CA *Dantrolene and derivatives***

<b>QM04</b>	<b>ANTIGOUT PREPARATIONS</b>
QM04A	ANTIGOUT PREPARATIONS
<b>QM04AA</b>	<i>Preparations inhibiting uric acid production</i>
<b>QM04AB</b>	<i>Preparations increasing uric acid excretion</i>
<b>QM04AC</b>	<i>Preparations with no effect on uric acid metabolism</i>
<b>QM04AX</b>	<i>Other antigout preparations</i>

## **QM05 DRUGS FOR TREATMENT OF BONE DISEASES**

See also:

QA11CC - *Vitamin D and analogues*

QA12A - *Calcium*

QA12AX - *Calcium, combinations with vitamin D and/or other drugs*

QH05BA - *Calcitonins*

## **QM05B DRUGS AFFECTING BONE STRUCTURE AND MINERALIZATION**

**QM05BA** *Bisphosphonates*

**QM05BB** *Bisphosphonates, combinations*

**QM05BC** *Bone morphogenetic proteins*

**QM05BX** *Other drugs affecting bone structure and mineralization*

## **QM09 OTHER DRUGS FOR DISORDERS OF THE MUSCULO-SKELETAL SYSTEM**

### **QM09A OTHER DRUGS FOR DISORDERS OF THE MUSCULO-SKELETAL SYSTEM**

Preparations used in disorders of the musculo-skeletal system, which cannot be classified in the preceding groups, should be assigned to this group.

**QM09AA** *Quinine and derivatives*

**QM09AB** *Enzymes*

**QM09AX** *Other drugs for disorders of the musculo-skeletal system*

Hyaluronic acid injection for intra-articular administration is classified in this group.

**QN        NERVOUS SYSTEM**

**QN01      ANESTHETICS**

- A     *Anesthetics, general*
- B     *Anesthetics, local*

**QN02      ANALGESICS**

- A     *Opioids*
- B     *Other analgesics and antipyretics*
- C     *Antimigraine preparations*

**QN03      ANTIEPILEPTICS**

- A     *Antiepileptics*

**QN04      ANTI-PARKINSON DRUGS**

- A     *Anticholinergic agents*
- B     *Dopaminergic agents*

**QN05      PSYCHOLEPTICS**

- A     *Antipsychotics*
- B     *Anxiolytics*
- C     *Hypnotics and sedatives*

**QN06      PSYCHOANALEPTICS**

- A     *Antidepressants*
- B     *Psychostimulants, agents used in ADHD and nootropics*
- C     *Psycholeptics and psychoanaleptics in combination*
- D     *Anti-dementia drugs*

**QN07      OTHER NERVOUS SYSTEM DRUGS**

- A     *Parasympathomimetics*
- C     *Antivertigo preparations*
- X     *Other nervous system drugs*

**QN51      PRODUCTS FOR ANIMAL EUTHANASIA**

- A     *Products for animal euthanasia*

## QN NERVOUS SYSTEM

Preparations affecting the nervous system, both centrally and peripherally, are classified in this group. Group headings are kept consistent with the ATC system. Owing to interspecies differences between animals and humans, the grouping of agents and the corresponding names of the groups may not always appear appropriate. For example, agents in QN05A - *Antipsychotics*, may more commonly be used as sedatives, tranquillizers or even antiemetics in veterinary medicine. Nevertheless, to minimize confusion between ATC and ATCvet, the group headings used in the ATC system will be preserved. Exceptions and further information will be found under each subgroup heading.

### QN01 ANESTHETICS

#### QN01A ANESTHETICS, GENERAL

Agents which produce general anesthesia, surgical analgesia or neuroleptanalgesia should be classified in this group. Benzodiazepine derivatives are classified in QN05BA or QN05CD. See also QM03A - *Muscle relaxants*.

##### QN01AA *Ethers*

##### QN01AB *Halogenated hydrocarbons*

##### QN01AF *Barbiturates, plain*

Barbiturates used as anesthetics should be classified in this group.

Barbiturates used as hypnotics/sedatives and as premedication, see

QN05CA - *Barbiturates, plain*. Phenobarbital is classified in  
QN03AA - *Barbiturates and derivatives*.

##### QN01AG *Barbiturates in combination with other drugs*

Only preparations used as anesthetics are classified in this group. See also  
QN05CB - *Barbiturates, combinations*.

##### QN01AH *Opioid anesthetics*

Opioid anesthetics in combination with other anesthetics are classified in this group.

##### QN01AX *Other general anesthetics*

Various plain and combined drugs used to produce anesthesia/analgesia, which cannot be classified in the preceding groups are classified in this group.

#### QN01B ANESTHETICS, LOCAL

Local anesthetics in this context means anesthetics which only affect a local area, as opposed to general anesthetics affecting the entire body. For example, creams, plasters and sprays containing lidocaine and prilocaine used as anesthetics in the skin are classified in this group.

Combinations with e.g. epinephrine are classified in separate 5th level groups using the 50-series codes or, if not available, using the ATCvet 5th level code 99.

Local anesthetics for dermatological use, such as treatment of pruritus, minor burns or insect stings, are classified in QD04AB - *Anesthetics for topical use*.

Stomatologicals with anesthetics, see QA01AD.

Throat products with anesthetics, see QR02AD - *Anesthetics, local*.

Ophthalmological anesthetics, see QS01HA.

**QN01BA** *Esters of aminobenzoic acid*

**QN01BB** *Amides*

Lidocaine and prilocaine, for example, are classified in this group. Lidocaine injections used as antiarrhythmics are classified in QC01BB - *Antiarrhythmics, class Ib*.

The combination of lidocaine and bupivacaine, with cetrizide and epinephrine is classified in QN01BB20 *combinations*.

**QN01BC** *Esters of benzoic acid*

**QN01BX** *Other local anesthetics*

**QN02** **ANALGESICS**

General analgesics and antipyretics should be classified in this group.

All salicylic acid derivatives except combinations with corticosteroids (QM01B) or opioids (QN02AJ) are classified in QN02BA - *Salicylic acid and derivatives*, as it is difficult to differentiate between the use of salicylates in rheumatic conditions and other therapeutic uses of salicylates.

All plain propionic acid derivatives (e.g. ibuprofen) are classified in QM01A - *Antiinflammatory products, non-steroids*, even if they are only intended for use as pain relief.

There are a number of combined products which contain analgesics and psycholeptics. These are classified in QN02 - *Analgesics*, since pain relief must be regarded as the main indication. Analgesics used for specific indications are classified in the relevant ATCvet groups.

E.g.:

QM01 - *Antiinflammatory products*

QM02A - *Topical products for joint and muscular pain*

QM03 - *Muscle relaxants*

Lidocaine indicated for postherpetic pain is classified in QN01BB.

**QN02A    OPIOIDS**

Strong analgesics of the opiate type and analgesics with a similar structure or action are classified in this group.

Combinations with antispasmodics are classified in QN02AG - *Opioids in combination with antispasmodics*.

**QN02AA    *Natural opium alkaloids***

This group includes natural and semi-synthetic opiates.

All plain morphine preparations are classified in this group.

Opium, see also QA07DA - *Antipropulsives*.

Plain codeine preparations are classified in QR05D - *Cough suppressants, excl. combinations with expectorants*, while dihydrocodeine is classified in QN02AA. Codeine or dihydrocodeine in combination with other analgesics or NSAIDs are classified in QN02AJ - *Opioids in combination with non-opioid analgesics*.

Other combinations with e.g. caffeine, antihistamines and anticholinergic agents are classified in QN02AA. Combinations of codeine with psycholeptics are classified in QN02AA79.

**QN02AB    *Phenylpiperidine derivatives***

Fentanyl formulations for parenteral use are classified in QN01AH - *Opioid anesthetics*.

**QN02AC    *Diphenylpropylamine derivatives***

Dextropropoxyphene, for example, should be classified in this group.

Dextropropoxyphen in combination with a muscle relaxant is classified in QM03B - *Muscle relaxants, centrally acting agents*.

In the ATCvet system methadone should be classified in QN02AC90.

**QN02AD    *Benzomorphan derivatives***

**QN02AE    *Oripavine derivatives***

Buprenorphine, for example, is classified in this group.

**QN02AF    *Morphinan derivatives***

**QN02AG    *Opioids in combination with antispasmodics***

Preparations are classified at the 5th level according to the analgesic. At each level different antispasmodics may occur.

Mirogabalin indicated for the treatment of peripheral neuropathic pain is classified here, while the other gabapentinoids, gabapentin and pregabalin, are classified in QN03AX - *Other antiepileptics*.

**QN02AJ    *Opioids in combination with non-opioid analgesics***

Includes combinations with opioids and other non-opioid analgesics (e.g. paracetamol, acetylsalicylic acid or NSAIDs). At each 5th level other active ingredients such as e.g. caffeine, vitamins and antihistamines are allowed.

Various combinations of codeine with other analgesics are included in QN02AJ09 - *codeine and other non-opioid analgesics*. For example, combinations containing three analgesic components (codeine, paracetamol and ibuprofen) are classified in QN02AJ09.

Various combinations of tramadol with other analgesics are included in QN02AJ15 - *tramadol and other non-opioid analgesics*. For example, combinations containing tramadol and ibuprofen (or ketorolac or diclofenac) are classified in QN02AJ15.

Combinations of codeine, non-opioid analgesics and psycholeptics are classified in QN02AA79 - *codeine, combinations with psycholeptics*. Other analgesics may be included in the 70-series codes.

All plain and combination products containing dextropropoxyphen are classified in QN02AC.

**QN02AX    *Other opioids***

Opioids, which cannot be classified in the preceding groups, should be assigned to this group.

**QN02B    OTHER ANALGESICS AND ANTIPYRETICS**

See general considerations under QN02.

Combinations with opioids should be classified in QN02AJ - *Opioids in combination with non-opioid analgesics*. Combinations with codeine, non-opioid analgesics and psycholeptics are classified in QN02AA79.

Combinations with opioids and antispasmodics are classified in QN02AG - *Opioids in combination with antispasmodics*.

Combinations with muscle relaxants are classified in QM03B.

Combined preparations which contain more than one analgesic should be classified using the following ranking:

1. Phenacetin
2. Bucetin
3. Dipyrocetyl
4. Paracetamol
5. Acetylsalicylic acid
6. Phenazone
7. Salicylamide
8. Propyphenazone

This means, that a product containing paracetamol and phenazone should be classified in QN02BE51 - *paracetamol, combinations excluding psycholeptics* and not in QN02BB51 - *phenazone, combinations excluding psycholeptics*.

Dextropropoxyphene, plain and in combination with other analgesics, is classified in QN02AC - *Diphenylpropylamine derivatives*.

Preparations are subdivided on the 4th level according to their chemical structure.

**QN02BA** *Salicylic acid and derivatives*

All salicylic acid derivatives, including some commonly regarded as non-steroidal antiinflammatory drugs, e.g. diflunisal, are classified in this group. See comment under QN02. Salicylic acid derivatives in combination with corticosteroids are assigned to QM01B - *Antiinflammatory agents in combination*.

**QN02BB** *Pyrazolones*

**QN02BE** *Anilides*

Combinations of paracetamol and e.g. ibuprofen are classified in QN02BE51.

**QN02BG** *Other analgesics and antipyretics*

Analgesics, which cannot be classified in the preceding groups, should be assigned to this group.

**QN02C** *ANTIMIGRAINE PREPARATIONS*

**QN02CA** *Ergot alkaloids*

**QN02CB** *Corticosteroid derivatives*

**QN02CC** *Selective serotonin (5HT<sub>1</sub>) agonists*

**QN02CD** *Calcitonin gene-related peptide (CGRP) antagonists*

**QN02CX** *Other antimigraine preparations*

**QN03** *ANTIEPILEPTICS*

**QN03A** *ANTIEPILEPTICS*

Preparations used in the treatment of epilepsy should be classified in this group. The group is subdivided on the 4th level according to chemical structure.

Combined preparations are classified in separate 5th level groups using the corresponding 50-series codes or, if not available, using the 5th level code 99.

**QN03AA** *Barbiturates and derivatives*

Primidon and phenobarbital, which are used as antiepileptics and as sedatives, are among the drugs classified in this group. Barbiturates used mainly as hypnotics/sedatives are classified in QN05C - *Hypnotics and sedatives*. Combinations with phenytoin are classified in QN03AB - *Hydantoin derivatives*.

**QN03AB** *Hydantoin derivatives*

Combinations with phenytoin are classified in this group.

**QN03AC** *Oxazolidine derivatives*

**QN03AD** *Succinimide derivatives*

**QN03AE** *Benzodiazepine derivatives*

Clonazepam is classified in this group. All other benzodiazepines are classified as anxiolytics in QN05B (e.g. diazepam) or hypnotics/sedatives in QN05C (e.g. midazolam).

**QN03AF** *Carboxamide derivatives*

**QN03AG** *Fatty acid derivatives*

**QN03AX** *Other antiepileptics*

Antiepileptics which cannot be classified in the preceding groups should be assigned to this group.

Mirogabalin indicated for the treatment of peripheral neuropathic pain is classified in QN02BG - *Other analgesics and antipyretics*, while the other gabapentinoids, gabapentin and pregabalin, are classified here.

## **QN04** ANTI-PARKINSON DRUGS

This group comprises preparations used in the treatment of Parkinson's disease and related conditions, including drug-induced parkinsonism.

Selegiline for veterinary use is given the 5th level code QN06AX90.

**QN04A** ANTICHOLINERGIC AGENTS

**QN04AA** *Tertiary amines*

**QN04AB** *Ethers chemically close to antihistamines*

**QN04AC** *Ethers of tropine or tropine derivatives*

**QN04B** DOPAMINERGIC AGENTS

**QN04BA** *Dopa and dopa derivatives*

**QN04BB** *Adamantane derivatives*

**QN04BC** *Dopamine agonists*

In the ATCvet system apomorphine and ropinirole for induction of emesis in dogs are classified in QV03AB.

**QN04BD** *Monoamine oxidase B inhibitors*

**QN04BX** *Other dopaminergic agents*

**QN04C** OTHER ANTIPARKINSON DRUGS

**QN04CX** *Other antiparkinson drugs*

**QN05 PSYCHOLEPTICS**

The group is divided into therapeutic subgroups:

QN05A - Antipsychotics

QN05B - Anxiolytics

QN05C - Hypnotics and sedatives

**QN05A ANTIPSYCHOTICS**

Preparations with antipsychotic actions (i.e. neuroleptics) should be classified in this group. In veterinary medicine, agents in this group may be used, for example, as sedatives, anxiolytics, as pre-anesthetics and even anti-emetics, depending on the animal and the dose. Azaperone and droperidol used as anesthetics should be classified in QN01AX - *Other general anesthetics*. Selegiline for veterinary use is classified in QN06AX90.

The group is subdivided mainly on the basis of chemical structure.

***QN05AA Phenothiazines with aliphatic side-chain***

Acepromazine and chlorpromazine, for example, are classified in this group.

***QN05AB Phenothiazines with piperazine structure******QN05AC Phenothiazines with piperidine structure******QN05AD Butyrophenone derivatives******QN05AE Indole derivatives******QN05AF Thioxanthene derivatives******QN05AG Diphenylbutylpiperidine derivatives******QN05AH Diazepines, oxazepines, thiazepines and oxepines******QN05AL Benzamides******QN05AN Lithium******QN05AX Other antipsychotics***

Antipsychotics, which cannot be classified in the preceding groups, should be assigned to this group.

**QN05B ANXIOLYTICS**

Preparations used in the treatment of anxiety and tension, e.g. benzodiazepines, should be classified in this group.

The group is subdivided on the basis of chemical structure.

***QN05BA Benzodiazepine derivatives***

Benzodiazepines should be classified in this group, despite the fact that in veterinary medicine these agents are often used for specific indications, e.g. as premedication for anesthesia combined with other sedatives or anesthetics, or

for indications like appetite stimulation. Benzodiazepines used mainly in the treatment of sleep disturbances in human medicine are classified in QN05C - *Hypnotics and sedatives*.

Clonazepam used in the treatment of epilepsy is classified in QN03 - *Antiepileptics*.

Benzodiazepines in combination with general anesthetics are classified in QN01A.

**QN05BB** *Diphenylmethane derivatives*

**QN05BC** *Carbamates*

**QN05BD** *Dibenzo-bicyclo-octadiene derivatives*

**QN05BE** *Azaspirodecanedione derivatives*

**QN05BX** *Other anxiolytics*

QN05C HYPNOTICS AND SEDATIVES

Preparations with mainly sedative or hypnotic actions should be classified in this group.

Melatonin receptor agonists are also classified in this group.

See also:

QN05A - *Antipsychotics*

QN05B - *Anxiolytics*

QR06A - *Antihistamines for systemic use*.

Combined preparations are classified in separate 4th level groups,

QN05CB - *Barbiturates, combinations* and QN05CX - *Hypnotics and sedatives in combination, excl. barbiturates*.

The group is subdivided on the basis of chemical structure.

**QN05CA** *Barbiturates, plain*

Preparations used as premedication are classified in this group.

Barbiturates used in general anesthesia are classified in QN01 - *General anesthetics*.

Barbiturates used mainly in the treatment of epilepsy, e.g. phenobarbital, are classified in QN03 - *Antiepileptics*.

Combined preparations are classified in QN05CB - *Barbiturates, combinations*, see comment under QN05C.

**QN05CB** *Barbiturates, combinations*

Combined products with mainly sedative action are classified in this group.

**QN05CC** *Aldehydes and derivatives*

**QN05CD** *Benzodiazepine derivatives*

Benzodiazepines used mainly in the treatment of sleep disturbances in human medicine, e.g. climazolam, are classified in this group. See also QN05BA - *Benzodiazepine derivatives*.

**QN05CE** *Piperidinedione derivatives*

**QN05CF** *Benzodiazepine related drugs*

**QN05CH** *Melatonin receptor agonists*

**QN05CM** *Other hypnotics and sedatives*

Drugs not classified in the preceding groups, should be assigned to this group.

**QN05CX** *Hypnotics and sedatives in combination, excl. barbiturates*

**QN06** **PSYCHOANALEPTICS**

This group comprises antidepressants, psychostimulants, nootropics and combinations with psycholeptics.

**QN06A** **ANTIDEPRESSANTS**

This group comprises preparations used in the treatment of endogenous and exogenous depressions.

The group is subdivided mainly according to mode of action. The various antidepressants have different modes of action, and the classification will not reflect the exact modes of action of the various agents.

Lithium, see QN05AN - *Lithium*.

Combination with psycholeptics, see QN06C.

**QN06AA** *Non-selective monoamine reuptake inhibitors*

**QN06AB** *Selective serotonin reuptake inhibitors*

**QN06AF** *Monoamine oxidase inhibitors, non-selective*

**QN06AG** *Monoamine oxidase A inhibitors*

**QN06AX** *Other antidepressants*

This group includes antidepressants, which cannot be classified in the preceding groups.

Selegiline for veterinary use is classified here.

**QN06B** **PSYCHOSTIMULANTS, AGENTS USED FOR ADHD AND NOOTROPICS**

Some drugs used in the treatment of narcolepsy are classified here.

Nootropics are classified in QN06BX.

**QN06BA** *Centrally acting sympathomimetics*

Amfetamine is classified in this group, see comment under QA08AA - *Centrally acting antiobesity products*.

**QN06BC** *Xanthine derivatives*

Caffeine in combination with respiratory stimulants is classified in QR07AB.

Systemic veterinary products containing propentofylline are classified in QC04AD.

**QN06BX** *Other psychostimulants and nootropics*

This group comprises substances regarded as nootropics.

Psychostimulants, which cannot be classified in the preceding groups, are also classified here.

Tacrine is classified in QN07AA.

Cyprodene (deanol cyclohexylpropionate) is classified in QN04BX04.

**QN06C** PSYCHOLEPTICS AND PSYCHOANALEPTICS IN COMBINATION

Combinations of e.g. antidepressants and anxiolytics are classified in this group.

**QN06CA** *Antidepressants in combination with psycholeptics*

Preparations are classified at 5th levels according to the antidepressant. At each level various psycholeptics may occur.

**QN06CB** *Psychostimulants in combination with psycholeptics*

**QN06D** ANTI-DEMENTIA DRUGS

**QN06DA** *Anticholinesterases*

**QN06DX** *Other anti-dementia drugs*

**QN07** OTHER NERVOUS SYSTEM DRUGS

Other nervous system drugs which cannot be classified under the preceding 2nd level codes in ATCvet group QN should be classified in this group.

**QN07A** PARASYMPATHOMIMETICS

**QN07AA** *Anticholinesterases*

Cholinergics in glaucoma, QS01EB - *Parasympathomimetics*.

**QN07AB** *Choline esters*

**QN07AX** *Other parasympathomimetics*

Pilocarpine is classified in this group. For ophthalmological use, see QS01EB - *Parasympathomimetics*.

QN07B DRUGS USED IN ADDICTIVE DISORDERS

Substances normally used exclusively in human medicine.

**QN07BA** *Drugs used in nicotine dependence*

**QN07BB** *Drugs used in alcohol dependence*

**QN07BC** *Drugs used in opioid dependence*

Methadone is classified here in the human ATC system. ATCvet products are classified in QN02AC90.

QN07C ANTIVERTIGO PREPARATIONS

**QN07CA** *Antivertigo preparations*

Cinnarizine in combination with diphenhydramine teoclate or dihydroergocristine are classified in QN07CA52.

QN07X OTHER NERVOUS SYSTEM DRUGS

**QN07XA** *Gangliosides and ganglioside derivatives*

**QN07XX** *Other nervous system drugs*

This group contains substances, which cannot be classified in the preceding groups.

Calcium, magnesium and potassium salts of oxybate are classified in QN07XX04 sodium oxybate.

**QN51** **PRODUCTS FOR ANIMAL EUTHANASIA**

Preparations intended for animal euthanasia should be classified in this group.

QN51A PRODUCTS FOR ANIMAL EUTHANASIA

**QN51AA** *Barbiturates*

Combinations of barbiturates are classified using the 5th level 30-series.

Barbiturates in combination with other agents are classified in separate 5th level groups using the corresponding 50-series codes according to the barbiturate included.

**QN51AX** *Other products for animal euthanasia*

**QP            ANTIPARASITIC PRODUCTS, INSECTICIDES AND REPELLENTS**

**QP51        ANTIprotozoals**

A    *Agents against protozoal diseases*

*Optional classification, see comment on QP51*

- B    Agents against coccidiosis*
- C    Agents against amoebosis and histomonosis*
- D    Agents against leishmaniosis and trypanosomosis*
- E    Agents against babesiosis and theileriosis*
- X    Other antiprotozoal agents*

**QP52        ANTHELMINTICS**

A    *Anthelmintics*

*Optional classification, see comment on QP52*

- B    Agents against trematodosis*
- C    Agents against nematodosis*
- D    Agents against cestodosis*
- X    Other anthelmintic agents*

**QP53        ECTOPARASITICIDES, INSECTICIDES AND REPELLENTS**

- A    Ectoparasiticides for topical use, incl. insecticides*
- B    Ectoparasiticides for systemic use*
- G    Repellents*

**QP54        ENDECTOCIDES**

A    *Macrocyclic lactones*

**QP**

## **ANTIPARASITIC PRODUCTS, INSECTICIDES AND REPELLENTS**

Group QP comprises antiparasitic preparations, including antiprotozoals, insecticides and repellants for local and systemic use. Substances are classified according to a chemical subdivision and may be used for several indications.

A special ATCvet classification has been established for the group QP. The ATCvet classification for group QP does not correspond to the classification for group P in the ATC system.

*Optional subgroups* should be used on a national basis for special purposes, for example if some indication is very important nationally. For further information, see QP51, QP52 and QP53.

Combinations of endectocides and other parasiticides are classified in QP54 - *Endectocides*.

**QP51**

### **ANTIPROTOZOALS**

In the ATCvet system all antiprotozoal agents are classified in group QP51A.

If a therapeutic subdivision of antiprotozoal agents is desired, it can be achieved by using the *optional 3rd level subgroups* QP51B, QP51C, QP51D and QP51E and using the same chemical subdivision at the 4th and 5th levels as is used in QP51A.

Optional classification to QP51A:

- QP51B - *Agents against coccidiosis*
- QP51C - *Agents against amoebosis and histomonosis*
- QP51D - *Agents against leishmaniosis and trypanosomosis*
- QP51E - *Agents against babesiosis and theileriosis*
- QP51X - *Other antiprotozoal agents*

*Optional subgroups* should be used on a national basis for special purposes, for example if a particular indication is very important nationally.

When the ATCvet system is used for sales statistics purposes, it has to be remembered that one product must have only one ATCvet code. For such purposes, the ATCvet code for the main indication should be chosen.

**QP51A**

### **AGENTS AGAINST PROTOZOAL DISEASES**

The group is subdivided at the 4th level according to chemical structure.

**QP51AA**

#### ***Nitroimidazole derivatives***

Combinations with antibacterials are classified in QJ01RA.

Nicarbazine used as a pesticide/avicide to reduce egg-hatchability in birds are classified here.

Combinations with sulfonamides are classified in QP51AG.

**QP51AB** *Antimony compounds*

**QP51AC** *Nitrofuran derivatives*

**QP51AD** *Arsenic compounds*

Arsenic compounds used against ectoparasites are classified in QP53AX.

**QP51AE** *Carbanilides*

**QP51AF** *Aromatic diamidines*

Different salts of pentamidine and diminazene are classified in this group.

**QP51AG** *Sulfonamides, plain and in combinations*

Combinations with nitroimidazole derivatives (QP51AA) are classified here.

Combinations of pyrimethamine and sulfonamides are classified in QP51AX51.

**QP51AH** *Pyranes and hydropyranes*

**QP51AJ** *Triazines*

Toltrazuril and clazuril are classified in this group.

Combinations of toltracuril and emodepside are classified in QP52AX60.

Both symmetrical and asymmetrical triazines are assigned to this group.

**QP51AX** *Other antiprotozoal agents*

Antiprotozoal agents which cannot be classified in the preceding groups should be assigned to this group.

Domperidone only indicated in treatment of leishmaniosis is classified here.

Combinations of pyrimethamine and sulfonamides are classified in here.

## **QP52** ANTHELMINTICS

In the ATCvet system all anthelmintics are classified in ATCvet group QP52A.

If a therapeutic subdivision of anthelmintics is desired, it can be achieved using *optional 3rd level subgroups* QP52B, QP52C, QP52D and using the same chemical subdivision at the 4th and 5th levels as is used in QP52A.

Optional classification to QP52A:

QP52B - *Agents against trematodosis*

QP52C - *Agents against nematodosis*

QP52D - *Agents against cestodosis*

QP52X - *Other anthelmintic agents*

*Optional subgroups* should be used on a national basis for special purposes, for example if a particular indication is very important nationally, an optional level could be used.

When the ATCvet system is used for sales statistics purposes, it has to be remembered that one product must have only one ATCvet code. For such purposes, the ATCvet code for the main indication should be chosen.

**QP52A ANTHELMINTICS**

Anthelmintics are subdivided at the 4th level according to chemical structure.

See also: QP53B - *Ectoparasiticides for systemic use*.

Combinations with minerals are allowed at the plain 5th levels.

**QP52AA *Quinoline derivatives and related substances***

Praziquantel in combination with emodepside, and in combination with emodepside and tigolaner are classified in QP52AA51.

**QP52AB *Organophosphorous compounds***

**QP52AC *Benzimidazoles and related substances***

Prodrugs to benzimidazoles, e.g. febantel, are classified in separate 5th levels.

**QP52AE *Imidazothiazoles***

**QP52AF *Tetrahydropyrimidines***

Combinations with tetrahydropyrimidines and moxidectin are classified in QP54AB.

**QP52AG *Phenol derivatives, incl. salicylanilides***

**QP52AH *Piperazine and derivatives***

**QP52AX *Other anthelmintic agent***

Combinations of emodepise and toltrazuril are classified here, while combinations of toltrazuril and praziquantel are classified in QP52AA51.

**QP53 ECTOPARASITICIDES, INSECTICIDES AND REPELLENTS**

**QP53A ECTOPARASITICIDES FOR TOPICAL USE, INCL. INSECTICIDES**

Ectoparasitic products intended for topical application are classified in this group.

Formulations intended for topical application which are absorbed and have a systemic effect are also assigned to this group.

The combination of praziquantel, emodepside and tigolaner indicated against both endo-and ectoparasites is classified in QP52AA51 *praziquantel, combinations*.

**QP53AA *Sulfur-containing products***

Various sulfur compounds, e.g. dixanthogen, mesulfen and disulfiram, are classified in this group.

Combinations with for example benzyl benzoate are classified in this group.

Combinations with chlorine compounds, see QP53AB.

**QP53AB** *Chlorine-containing products*

Lofenotane and lindane, for example, are classified in this group as are combinations with sulfur compounds.

**QP53AC** *Pyrethrins and pyrethroids*

Various pyrethrum products, including synthetic pyrethroids and combinations with e.g. piperonyl butoxide are classified in this group.

The combination of permethrin and imidacloprid is classified here.

The combination of permethrin and pyriproxyfen is classified here.

The combination of permethrin and fipronil is classified here.

**QP53AD** *Amidines*

The combination of amitraz and metaflumizone is classified here.

**QP53AE** *Carbamates*

**QP53AF** *Organophosphorous compounds*

**QP53AG** *Organic acids*

**QP53AX** *Other ectoparasiticides for topical use*

The combination of imidaclopride and permethrin is classified in QP53AC.

The combination of pyriproxyfen and permethrin is classified in QP53AC.

The combination of amitraz and metaflumizone is classified in QP53AD.

Combination of fipronil and permethrin is classified in QP53AC.

Combinations with eucalyptus oil, camphora and levomentol is allowed at the plain level for thymol (QP53AX22).

**QP53B** ECTOPARASITICIDES FOR SYSTEMIC USE

The classification is made according to the main therapeutic use.

Products for systemic use against ectoparasites are classified in this group.

Products also used as anthelmintics are classified in QP52.

**QP53BB** *Organophosphorous compounds*

**QP53BC** *Chitin synthesis inhibitors*

**QP53BE** *Isoxazolines*

Combination with isoxazolines and moxidectin are classified in Q54AB.

**QP53BX** *Other ectoparasiticides for systemic use*

**QP53G REPELLENTS**

Products put on the animal to repel insects are classified in this group.

***QP53GX Various repellents***

**QP54 ENDECTOCIDES**

Endectocides, both for systemic and topical use, are classified in this group.

Combinations of endectocides and other parasiticides are classified here.

**QP54A MACROCYCLIC LACTONES**

***QP54AA Avermectines***

***QP54AB Milbemycins***

***QP54AX Other macrocyclic lactones***

**QR            RESPIRATORY SYSTEM**

**QR01        NASAL PREPARATIONS**

- A     *Decongestants and other nasal preparations for topical use*
- B     *Nasal decongestants for systemic use*

**QR02        THROAT PREPARATIONS**

- A     *Throat preparations*

**QR03        DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES**

- A     *Adrenergics, inhalants*
- B     *Other drugs for obstructive airway diseases, inhalants*
- C     *Adrenergics for systemic use*
- D     *Other systemic drugs for obstructive airway diseases*

**QR05        COUGH AND COLD PREPARATIONS**

- C     *Expectorants, excl. combinations with cough suppressants*
- D     *Cough suppressants, excl. combinations with expectorants*
- F     *Cough suppressants and expectorants, combinations*
- X     *Other cold preparations*

**QR06        ANTIHISTAMINES FOR SYSTEMIC USE**

- A     *Antihistamines for systemic use*

**QR07        OTHER RESPIRATORY SYSTEM PRODUCTS**

- A     *Other respiratory system products*

## QR RESPIRATORY SYSTEM

Preparations for the treatment of diseases in the respiratory system, i.e. the nose, throat and lungs, are classified in this group. Their therapeutic use and hence their classification are based either on the active substance or on the route of administration and formulation.

Corticosteroids and cromoglicate preparations formulated as nasal sprays, nasal drops or nasal inhalants for topical treatment or prevention of allergic rhinitis are classified in QR01A - *Decongestants and other nasal preparations for topical use*. Corticosteroids for systemic use, however, would be classified in QH02 - *Corticosteroids for systemic use*. Cromoglicate, formulated as a nebulizer and used as an antiasthmatic, would be classified in QR03BC01.

Preparations for nasal administration for systemic use, e.g. oxytocin, are classified in QH - *Systemic hormonal preparations, excl. sex hormones and insulins*.

The group QR includes, for example, opium alkaloids and derivates used as cough suppressants (noscapine), acetylcysteine used as a mucolytic, adrenergics for systemic use indicated for bronchial asthma (clenbuterol) and antihistamines (piperazine derivates) for systemic use, used in motion sickness.

The use of above-mentioned preparations in veterinary medicine is well established, but for many of the remaining preparations within this group the classification is based on the ATC classification for human medicine.

### QR01 NASAL PREPARATIONS

#### QR01A DECONGESTANTS AND OTHER NASAL PREPARATIONS FOR TOPICAL USE

ATCvet level QR01AX10 is an old level where rather obsolete nasal preparations and sodium chloride nasal products are classified. The level QR01AX30 is for nasal combination products which cannot be classified in the preceding groups.

**QR01AA** *Sympathomimetics, plain*

**QR01AB** *Sympathomimetics, combinations excl. corticosteroids*

**QR01AC** *Antiallergic agents, excl. corticosteroids*

**QR01AD** *Corticosteroids*

**QR01AX** *Other nasal preparations*

QR01B NASAL DECONGESTANTS FOR SYSTEMIC USE

**QR01BA** *Sympathomimetics*

### QR02 THROAT PREPARATIONS

Throat preparations and mouth preparations are classified in the groups QR02 and A01 according to assumed main therapeutic use. Preparations used in common minor infections of mouth and throat are classified in QR02, while

preparations used in gingivitis, stomatitis etc. are classified in QA01 - *Stomatological preparations*.

Expectorants administered as tablets are classified in QR05 - *Cough and cold preparations*.

QR02A      THROAT PREPARATIONS

**QR02AA      *Antiseptics***

See also QA01AB - *Antiinfectives and antiseptics for local oral treatment*.

At each 5th level combinations with anesthetics are allowed.

The combination dichlorobenzyl alcohol and amyl-m-cresol is classified in QR02AA03.

**QR02AB      *Antibiotics***

See also QA01AB - *Antiinfectives and antiseptics for local oral treatment*.

Combinations of antibiotics and antiseptics are classified in this group.

Antibiotics for systemic use, see QJ01.

**QR02AD      *Anesthetics, local***

This group comprises e.g. throat lozenges containing local anesthetics. Dental anesthetics for local application are classified in QN01B - *Anesthetics, local*.

Combinations of anesthetics and antiseptics/antibiotics are classified in QR02AA/QR02AB respectively.

**QR02AX      *Other throat preparations***

Combinations of benzydamine and cetylpyridinium are classified at the same 5th level as benzydamine.

**QR03      DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES**

QR03A      ADRENERGICS, INHALANTS

Adrenergics used to repress labour are classified in QG02CA - *Sympathomimetics, labour repressants*.

**QR03AA      *Alpha- and beta-adrenoreceptor agonists***

**QR03AB      *Non-selective beta-adrenoreceptor agonists***

**QR03AC      *Selective beta-2-adrenoreceptor agonists***

**QR03AH      *Combinations of adrenergics***

**QR03AK      *Adrenergics in combination with corticosteroids or other drugs, excl. anticholinergics***

**QR03AL      *Adrenergics in combinations with anticholinergics incl. triple combinations with corticosteroids***

QR03B OTHER DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES, INHALANTS

All drugs for obstructive airway diseases for inhalation, excluding adrenergics (QR03A), should be classified in this group.

**QR03BA Glucocorticoids**

Combinations with adrenergics are classified in QR03AK.

Combinations with anticholinergics are classified in QR03BB.

The combination of ciclosonide and tiotropium bromide is classified in QR03AL54.

**QR03BB Anticholinergics**

Combinations with adrenergics are classified in QR03AL.

The combination of tiotropium bromide and ciclosonide is classified in QR03BB54.

**QR03BC Antiallergic agents, excl. corticosteroids**

**QR03BX Other drugs for obstructive airway diseases, inhalants**

QR03C ADRENERGICS FOR SYSTEMIC USE

Adrenergics for systemic use indicated for bronchial asthma should be classified in this group.

Fenoterol and clenbuterol infusions only intended for repressing preterm labour are classified in QG02CA *Sympathomimetics, labour repressants*. Combinations with xanthines are classified in QR03DB. Combinations with other anti-asthmatics are classified in QR03CK *Adrenergics and other drugs for obstructive airway diseases*.

**QR03CA Alpha- and beta-adrenoreceptor agonists**

Ephedrine injections are classified in QC01C - *Cardiac stimulants excl. cardiac glycosides*.

**QR03CB Non-selective beta-adrenoreceptor agonists**

**QR03CC Selective beta-2-adrenoreceptor agonists**

**QR03CK Adrenergics and other drugs for obstructive airway diseases**

Combinations of adrenergics and other drugs for obstructive airway diseases e.g. bronchial asthma and COPD (excl. xanthines, see QR03DB) are classified in this group.

**QR03D OTHER SYSTEMIC DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES**

Theophyllines are classified in this group. Other respiratory stimulants are classified in QR07AB - *Respiratory stimulants*.

See also:

QH02 - *Corticosteroids for systemic use*

**QR03DA *Xanthines***

A number of preparations containing theophylline, for example, are classified in this group, even if they do not have asthma as an indication.

Combinations of xanthines and other agents are classified in separate 5th level groups using the corresponding 50-series codes (e.g. mucolytics), except combinations with adrenergics, see QR03DB - *Xanthines and adrenergics*.

Combinations of two or more substances within the 4th level group are classified using the ATCvet 5th level code 20.

**QR03DB *Xanthines and adrenergics***

**QR03DC *Leucotriene receptor antagonists***

**QR03DX *Other systemic drugs for obstructive airway diseases***

Preparations, which cannot be classified in the preceding groups, should be assigned to this group.

**QR05 COUGH AND COLD PREPARATIONS**

A large number of preparations, most of which are combined preparations, are classified in this group. See also QR01 - *Nasal preparations*, QR02 - *Throat preparations* and QR03D - *Other systemic drugs for obstructive airway diseases*.

Cold preparations containing therapeutic levels of antiinfectives should be classified in ATC group QJ - *Antiinfectives for systemic use*.

**QR05C EXPECTORANTS, EXCL. COMBINATIONS WITH COUGH SUPPRESSANTS**

Preparations containing expectorants and mucolytics should be classified in this group.

Combined preparations are classified in separate 5th level groups using the ATCvet 5th level code 10. These may also contain e.g. antihistamines.

Combinations with adrenergics, e.g. ambroxol and clenbuterol, used in e.g. bronchial asthma are classified in QR03C - *Adrenergics for systemic use*.

Preparations which contain small amounts of herbal extracts, menthol etc., are classified as plain preparations.

**QR05CA *Expectorants***

All combined products comprising expectorants should be assigned to QR05CA10 - *combinations of expectorants*.

**QR05CB *Mucolytics***

Acetylcystein used as a mucolytic agent (e.g. administered by a nebulizer) is classified here.

All combined products comprising mucolytics should be assigned to QR05CB10. Combinations with xanthines should be classified in QR03DA - *Xanthines*.

**QR05D COUGH SUPPRESSANTS, EXCL. COMBINATIONS WITH EXPECTORANTS**

Combined products are classified in separate 5th level groups using the 5th level code 20 (QR05DA20 or QR05DB20). These may contain bronchodilating agents, antihistamines etc. Combinations with expectorants are classified in QR05F. Preparations which contain small amounts of herbal extracts, menthol etc. are classified as plain preparations.

All dihydrocodeine products, also when used as cough suppressants are classified in QN02AA.

**QR05DA *Opium alkaloids and derivatives***

Plain codeine, also when used as an analgesic, is classified in this group.

Plain dihydrocodeine products, also used as cough suppressants, are classified in QN02AA.

All combined preparations containing opium alkaloids and derivatives are assigned to QR05DA20 - *combinations of opium alkaloids and derivatives*.

**QR05DB *Other cough suppressants***

Levocloperastine is classified together with cloperastine in QR05DB21.

All combined preparations comprising antitussives chemically close to local anesthetics are assigned to QR05DB20 - *combinations*.

**QR05F COUGH SUPPRESSANTS AND EXPECTORANTS, COMBINATIONS**

In addition to cough suppressants and expectorants, the preparations may contain bronchodilating agents, antihistamines etc.

Combinations which contain respiratory stimulants, e.g. theophylline, should be classified in QR03DA - *Xanthines*.

**QR05FA *Opium derivatives and expectorants***

**QR05FB *Other cough suppressants and expectorants***

**QR05X OTHER COLD PREPARATIONS**

Cold preparations with various ingredients, which cannot be classified in the preceding groups, should be assigned to this group.

**QR06 ANTIHISTAMINES FOR SYSTEMIC USE****QR06A ANTIHISTAMINES FOR SYSTEMIC USE**

Antihistamines could be classified in QD - *Dermatologicals*, QR - *Respiratory system* or QS - *Sensory organs*.

Plain and combined antihistamine preparations for systemic use should be classified in this group. Antihistamines used in motion sickness are also classified in this group. Other preparations used in motion sickness, see QA04 - *Antiemetics and antinauseants*.

Combined preparations (including combinations with hydroxyzine) are classified in separate 5th levels using the corresponding 50-series codes.

Combinations of antihistamines are classified as a separate 4th level group, QR06AK - *Combinations of antihistamines*.

Antihistamines are also included in combined products classified in other groups: Combinations with xanthines are classified in QR03DA

Combinations with nasal decongestants for systemic use are classified in QR01B

Combinations with expectorants are classified in QR05C

Combinations with cough suppressants are classified in QR05D

The group is subdivided according to chemical structure.

**QR06AA *Aminoalkyl ethers***

Combinations of cinnarizine and dimenhydrinate (diphenhydramine teoclate) are classified in QN07CA - *Antivertigo preparations*.

**QR06AB *Substituted alkylamines*****QR06AC *Substituted ethylene diamines*****QR06AD *Phenothiazine derivatives*****QR06AE *Piperazine derivatives***

Cinnarizine and flunarizine are classified in QN07C - *Antivertigo products*.

**QR06AK *Combinations of antihistamines*****QR06AX *Other antihistamines for systemic use***

**QR07 OTHER RESPIRATORY SYSTEM PRODUCTS**

**QR07A OTHER RESPIRATORY SYSTEM PRODUCTS**

Lung surfactants and respiratory stimulants should be classified in this group.

**QR07AA *Lung surfactants***

Surface-tension lowering agents used in respiratory distress syndrome should be classified in this group. Combinations of different lung surfactants are assigned to QR07AA30 - *combinations*.

**QR07AB *Respiratory stimulants***

Centrally acting respiratory stimulants mainly used for asthma and similar respiratory diseases (e.g. theophylline) are classified in QR03D - *Other systemic drugs for obstructive airway diseases*. Other respiratory stimulants are classified here. This group includes plain and combined preparations.

**QR07AX *Other respiratory system products***

**QS            SENSORY ORGANS**

**QS01        OPHTHALMOLOGICALS**

- A    *Antiinfectives*
- B    *Antiinflammatory agents*
- C    *Antiinflammatory agents and antiinfectives in combination*
- E    *Antiglaucoma preparations and miotics*
- F    *Mydriatics and cycloplegics*
- G    *Decongestants and antiallergics*
- H    *Local anesthetics*
- J    *Diagnostic agents*
- K    *Surgical aids*
- X    *Other ophthalmologicals*

**QS02        OTOLOGICALS**

- A    *Antiinfectives*
- B    *Corticosteroids*
- C    *Corticosteroids and antiinfectives in combination*
- D    *Other otologicals*
- Q    *Antiparasitics*

**QS03        OPHTHALMOLOGICAL AND OTOLOGICAL PREPARATIONS**

- A    *Antiinfectives*
- B    *Corticosteroids*
- C    *Corticosteroids and antiinfectives in combination*
- D    *Other ophthalmological and otological preparations*

## QS      SENSORY ORGANS

Preparations for topical treatment of diseases in the sensory organs, i.e. the eyes and the ears, are classified in this group. The therapeutic main groups are classified as ophthalmologicals, group QS01, and otologicals, group QS02.

Preparations used to treat both eye and ear diseases are classified in group QS03.

A formulation approved both for use in the eye/ear is classified in QS03, while formulations only licensed for use in the eye or the ear are classified in QS01 and QS02, respectively. Formulations approved for eye, ear and nose are also classified in QS03.

The therapeutic subgroups include, for example, antiinfectives, antiinflammatory agents, miotics, mydriatics, antiglaucoma preparations, surgical aids (for eyes) and local anesthetics. Some of the preparations classified as surgical aids, e.g. QS01KA - *Viscoelastic substances*, might also be classified as medical devices.

Systemic preparations for treatment of glaucoma is classified in QS01E.

### QS01    OPHTHALMOLOGICALS

Most of the drugs in this group are topical preparations. Systemic preparations with clear ophthalmological indications are also classified in this group.

Small amounts of antiseptics in eye products do not influence the classification. See also QS03 - *Ophthalmological and otological preparations*.

#### QS01A    ANTIINFECTIVES

Plain and combined antiinfective preparations for ophthalmological use should be classified in this group.

Combinations with corticosteroids are classified in QS01CA - *Corticosteroids and antiinfectives in combination*.

#### QS01AA    *Antibiotics*

Combinations of different antibiotics (including sulfonamides) are assigned to a separate 5th level group: QS01AA30.

Combinations with other drugs (e.g. sympathomimetics) are assigned to a separate 5th level group: QS01AA20.

Combinations with antiinflammatory agents are classified in group QS01C - *Antiinflammatory agents and antiinfectives in combination*.

#### QS01AB    *Sulfonamides*

Combinations with antibiotics are classified in QS01AA - *Antibiotics*.

#### QS01AD    *Antivirals*

#### QS01AE    *Fluoroquinolones*

**QS01AX Other antiinfectives**

Preparations for ophthalmological use, which cannot be classified in the preceding groups, should be assigned to this group. Preparations containing boric acid, even at low strengths, are classified in this group.

**QS01B ANTIINFLAMMATORY AGENTS**

All eye preparations with non-steroidal antiinflammatory agents, and corticosteroids, plain and combinations, should be classified in this group.

Combinations with antiinfectives are classified in QS01C - *Antiinflammatory agents and antiinfectives in combination*.

**QS01BA Corticosteroids, plain**

**QS01BB Corticosteroids and mydriatics in combination**

Combinations, which in addition contain anticholinergics, are classified here.

Combinations, which in addition contain antiinfectives, are classified in QS01CB - *Corticosteroids/antiinfectives/mydriatics in combination*.

**QS01BC Antiinflammatory agents, non-steroids**

**QS01C ANTIINFLAMMATORY AGENTS AND ANTIINFECTIVES IN COMBINATION**

All eye preparations which contain corticosteroids, non-steroidal antiinflammatory agents and antiinfectives should be classified in this group. Preparations may also contain additional drugs.

**QS01CA Corticosteroids and antiinfectives in combination**

Preparations are classified according to the corticosteroid. Different antiinfectives may occur in each 5th level group.

**QS01CB Corticosteroids/antiinfectives/mydriatics in combination**

Preparations are classified according to the corticosteroid. Different antiinfectives may occur in each 5th level group.

**QS01CC Antiinflammatory agents, non-steroids and antiinfectives in combination**

**QS01E ANTIGLAUCOMA PREPARATIONS AND MIOTICS**

Preparations for local and systemic treatment of glaucoma should be classified in this group. Drugs used for producing miosis are classified in this group, even if the main indication is not glaucoma.

**QS01EA Sympathomimetics in glaucoma therapy**

Preparations containing epinephrine and pilocarpine in combination are classified in QS01EB - *Parasympathomimetics*.

**QS01EB Parasympathomimetics**

**QS01EC** *Carbonic anhydrase inhibitors*

Carbonic anhydrase inhibitors used for different indications are classified in this group.

**QS01ED** *Beta blocking agents*

Combinations of beta blocking agents and other substances, e.g. pilocarpine, are classified in this group, in separate 5th level groups using the corresponding 50-series codes or, if not available, using the ATCvet 5th level code 99.

**QS01EE** *Prostaglandin analogues*

**QS01EX** *Other antiglaucoma preparations*

**QS01F** MYDRIATICS AND CYCLOPLEGICS

**QS01FA** *Anticholinergics*

Combinations with sympathomimetics are classified in this group.

Combinations with corticosteroids are classified in QS01BB - *Corticosteroids and mydriatics in combination*.

**QS01FB** *Sympathomimetics, excl. antiglaucoma preparations*

Phenylephrine at high strengths is classified in this group, see also QS01GA - *Sympathomimetics used as decongestants*. Sympathomimetics used in glaucoma therapy, see QS01EA.

**QS01G** DECONGESTANTS AND ANTIALLERGICS

Drugs used to treat symptoms of e.g. allergy should be classified in this group.

**QS01GA** *Sympathomimetics used as decongestants*

Sympathomimetics used as decongestants, plain and in combinations, should be classified in this group. Low-strength phenylephrine, for example, in combination with other drugs is classified in this group. See also QS01FB - *Sympathomimetics excl. antiglaucoma preparations*.

**QS01GX** *Other antiallergics*

Combinations of cromoglicic acid and antihistamines are also classified in this group.

**QS01H** LOCAL ANESTHETICS

Topical drugs used as local anesthetics in the eye should be classified in this group. Local anesthetics for other indications are classified in QN01B - *Anesthetics, local*. Other exceptions, see comments on QN01B.

Combinations of local anesthetics and diagnostic agents, e.g. fluorescein, are classified in QS01J - Diagnostic agents.

**QS01HA** *Local anesthetics*

QS01J DIAGNOSTIC AGENTS

Topical drugs used for diagnosing diseases in the eye should be classified in this group. Mydriatics and cycloplegics used as diagnostic aids are classified in QS01F. Diagnostic agents for systemic use for ophthalmological diagnoses, e.g. fluorescein injection, are classified in QV04CX - *Other diagnostic agents*.

**QS01JA** *Colouring agents*

**QS01JX** *Other ophthalmological diagnostic agents*

QS01K SURGICAL AIDS

Preparations used in ophthalmological surgery should be classified in this group. Miotics are classified in QS01E - *Antiglaucoma preparations and miotics*. Mydriatics and cycloplegics are classified in QS01F.

**QS01KA** *Viscoelastic substances*

Hyaluronic acid injection used during surgical procedures on the eye is classified in this group. Hyaluronic acid injection for intra-articular administration used in the treatment of arthritis is classified in QM09A - *Other drugs for disorders of the musculo-skeletal system*.

Hypromellose is classified in this group. Hypromellose used as artificial tears, however, is classified in QS01XA20 - *artificial tears and other indifferent preparations*.

**QS01KX** *Other surgical aids*

Preparations containing for example enzymes (chymotrypsin) for use in eye surgery are classified in this group.

QS01L OCULAR VASCULAR DISORDER AGENTS

**QS01LA** *Antineovascularisation agents*

QS01X OTHER OPHTHALMOLOGICALS

Preparations which cannot be assigned to the preceding groups, e.g. artificial tears, drugs against cataract etc., should be classified in this group. All preparations containing boric acid are classified in QS01AX - *Other antiinfectives*.

**QS01XA** *Other ophthalmologicals*

Hypromellose is classified in QS01KA - *Viscoelastic substances*. However, hypromellose used in artificial tears are classified in QS01XA20.

**QS02 OTOLOGICALS**

Small amounts of antiseptics in otological products do not influence the classification. See also QS03 - *Ophthalmological and otological preparations*.

**QS02A ANTIINFECTIVES**

Plain and combined antiinfective preparations for otological use should be classified in this group.

Combined preparations are classified in a separate 5th level group - QS02AA30 - *antiinfectives, combinations*. This code includes combinations of different antiinfectives and combinations of antiinfectives/other substances.

Combinations with corticosteroids are classified in QS02C - *Corticosteroids and antiinfectives in combination*.

**QS02AA *Antiinfectives***

Otological preparations containing the combination of gentamicin and dimethylsulfoxide are classified in QS02AA14 - *gentamicin*.

**QS02B CORTICOSTEROIDS**

All otological preparations containing corticosteroids, plain and in combination, should be classified in this group.

Combinations with antiinfectives are classified in QS02C - *Corticosteroids and antiinfectives in combination*.

**QS02BA *Corticosteroids*****QS02C CORTICOSTEROIDS AND ANTIINFECTIVES IN COMBINATION**

All otological preparations, which contain corticosteroids and antiinfectives, should be classified in this group. Preparations may also contain additional substances.

**QS02CA *Corticosteroids and antiinfectives in combination***

The preparations are classified at separate 5th levels according to the corticosteroid. Different antiinfectives may occur at each 5th level.

**QS02D OTHER OTOLOGICALS**

Ear preparations, which cannot be classified in the preceding groups, should be assigned to this group.

**QS02DA *Analgesics and anesthetics***

Preparations containing analgesics and/or local anesthetics should be classified in this group.

**QS02DC** *Indifferent preparations*

Oil-preparations, for example, used to remove ear wax are classified in this group.

**QS02Q** **ANTIPARASITICS**

Ear preparations containing antiparasitic drugs are classified in this group.

**QS02QA** *Antiparasitics*

**QS03** **OPHTHALMOLOGICAL AND OTOLOGICAL PREPARATIONS**

Preparations, which can be used in both the eye and the ear, should be classified in this group. Small amounts of antiseptics do not influence the classification.

Formulations approved for eye, ear and nose should also be classified in QS03.

**QS03A** **ANTIINFECTIVES**

**QS03AA** *Antiinfectives*

Plain and combined antiinfective preparations for use in the eye/ear should be classified in this group.

Combined preparations are classified in a separate 5th level group, QS03AA30 - *antiinfectives, combinations*. This level includes combinations of different antiinfectives and combinations of antiinfectives and other substances. Combinations with corticosteroids are classified in QS03C - *Corticosteroids and antiinfectives in combination*.

**QS03B** **CORTICOSTEROIDS**

All eye/ear products containing corticosteroids, plain and in combination, should be classified in this group. Combinations containing antiinfectives are classified in QS03C - *Corticosteroids and antiinfectives in combination*.

**QS03BA** *Corticosteroids*

**QS03C** **CORTICOSTEROIDS AND ANTIINFECTIVES IN COMBINATION**

All eye/ear preparations which contain corticosteroids and antiinfectives should be classified in this group. Preparations may also contain additional substances.

**QS03CA** *Corticosteroids and antiinfectives in combination*

The preparations are classified according to the corticosteroid. Different antiinfectives may occur at each 5th level.

**QS03D** **OTHER OPHTHALMOLOGICAL AND OTOLOGICAL PREPARATIONS**

Eye/ear preparations, which cannot be classified in the preceding groups, should be assigned to this group.

**QV      VARIOUS**

**QV01    ALLERGENS**

A    *Allergens*

**QV03    ALL OTHER THERAPEUTIC PRODUCTS**

A    *All other therapeutic products*

**QV04    DIAGNOSTIC AGENTS**

- B    *Urine tests*
- C    *Other diagnostic agents*

**QV06    GENERAL NUTRIENTS**

- A    *Diet formulations for treatment of obesity*
- B    *Protein supplements*
- C    *Infant animal formulas*
- D    *Other nutrients*

**QV07    ALL OTHER NON-THERAPEUTIC PRODUCTS**

A    *All other non-therapeutic products*

**QV08    CONTRAST MEDIA**

- A    *X-ray contrast media, iodinated*
- B    *X-ray contrast media, non-iodinated*
- C    *Magnetic resonance imaging contrast media*
- D    *Ultrasound contrast media*

**QV09    DIAGNOSTIC RADIOPHARMAEUTICALS**

- A    *Central nervous system*
- B    *Skeleton*
- C    *Renal system*
- D    *Hepatic and reticulo endothelial system*
- E    *Respiratory system*
- F    *Thyroid*
- G    *Cardiovascular system*
- H    *Inflammation and infection detection*
- I    *Tumour detection*
- X    *Other diagnostic radiopharmaceuticals*

**QV10    THERAPEUTIC RADIOPHARMACEUTICALS**

- A    *Antiinflammatory agents*
- B    *Pain palliation (bone seeking agents)*
- C    *Other therapeutic radiopharmaceuticals*

**QV20    SURGICAL DRESSINGS**

## **QV      VARIOUS**

This group is the most heterogenous one. Most preparations assigned to it cannot be classified in any other anatomical main group. Some of the preparations could also be classified as medical devices or general nutrients.

Diagnostic and therapeutic radiopharmaceuticals are classified in this group.

### **QV01    ALLERGENS**

QV01A    ALLERGENS

### **QV03    ALL OTHER THERAPEUTIC PRODUCTS**

QV03A    ALL OTHER THERAPEUTIC PRODUCTS

#### **QV03AB    *Antidotes***

Sugammadex indicated for reversal of neuromuscular blockade induced by rocuronium or vecuronium is classified here.

Hydroxocobalamin is also classified in QB03BA - *Vitamin B<sub>12</sub>* (Cyanocobalamin and derivatives).

Medicinal charcoal is classified in QA07BA - *Charcoal preparations*.

Atropine is classified in QA03BA - *Belladonna alkaloids, tertiary amines*.

Penicillamine, which is also used in copper poisoning, is classified in QM01CC - *Penicillamin and similar agents*.

Anticholinesterases which are used as curare antidotes are classified in QN07AA - *Anticholinesterases*.

Combinations of oxycodone and naloxone are classified in QN02AA - *Natural opium alkaloids*.

Combinations of buprenorphine and naloxone are classified in QN07BC - *Drugs used in opioid dependence*.

#### **QV03AC    *Iron-chelating agents***

#### **QV03AE    *Drugs for treatment of hyperkalemia and hyperphosphatemia***

#### **QV03AF    *Detoxifying agents for antineoplastic treatment***

Mesna for i.v. administration, used for the prophylaxis of urothelial toxicity, should be classified in this group. Mesna used as a mucolytic agent, however, is classified in QR05CB - *Mucolytics*.

#### **QV03AG    *Drugs for treatment of hypercalcemia***

Sodium cellulose phosphate should be classified here.

See also QM05 - *Drugs for treatment of bone diseases*.

Cinacalcet indicated for secondary hyperparathyroidism is classified in QH05BX.

**QV03AH** *Drugs for treatment of hypoglycemia*

Oral preparations containing diazoxide for the treatment of hypoglycemia should be classified in this group, while parenteral products used for treatment of hypertension are classified in QC02DA.

**QV03AK** *Tissue adhesives*

**QV03AM** *Drugs for embolisation*

**QV03AN** *Medical gases*

**QV03AX** *Other therapeutic products*

Agents which cannot be classified in the preceding groups should be assigned to this group.

Nalfurafine and difelikefalin indicated for pruritus in chronic kidney disease are classified here.

**QV03AZ** *Nerve depressants*

Ethanol used in ablation procedures is classified here.

**QV04** **DIAGNOSTIC AGENTS**

**QV04B** **URINE TESTS**

**QV04C** **OTHER DIAGNOSTIC AGENTS**

Only substances approved as drugs and used in vivo will be included in the ATCvet classification system.

**QV04CA** *Tests for diabetes*

**QV04CB** *Tests for fat absorption*

**QV04CC** *Tests for bile duct patency*

Pancreozymin should be classified in QV04CK - *Tests for pancreatic function*.

**QV04CD** *Tests for pituitary function*

See also QV04CM - *Tests for fertility disturbances*.

**QV04CE** *Tests for liver functional capacity*

**QV04CF** *Tuberculosis diagnostics*

**QV04CG** *Tests for gastric secretion*

**QV04CH** *Tests for renal function and ureteral injuries*

**QV04CJ** *Tests for thyroidea function*

**QV04CK** *Tests for pancreatic function*

QV04CK01 - *secretin* includes synthetic, pork, and human secretin.

**QV04CL** *Tests for allergic diseases*

See also QI - *Immunologicals*.

**QV04CM** *Tests for fertility disturbances*

Gonadorelin, for example, used for fertility disturbances is classified in this group.  
See also QH01CA - *Gonadotropin-releasing hormones*.

**QV04CQ** *Tests for mastitis*

**QV04CV** *Tests for respiratory function*

**QV04CX** *Other diagnostic agents*

## **QV06** GENERAL NUTRIENTS

This group comprises nutrients for oral use. Solutions for parenteral nutrition are classified in QB05BA.

**QV06A** DIET FORMULATIONS FOR TREATMENT OF OBESITY

See also A08 - *Antiobesity preparations, excl. diet products*.

**QV06AA** *Low-energy diets*

**QV06B** PROTEIN SUPPLEMENTS

**QV06C** INFANT ANIMAL FORMULAS

**QV06CA** *Nutrients without phenylalanine*

**QV06D** OTHER NUTRIENTS

This group comprises a major part of the general nutrients.

**QV06DA** *Carbohydrates/proteins/minerals/vitamins, combinations*

**QV06DB** *Fat/carbohydrates/proteins/minerals/vitamins, combinations*

**QV06DC** *Carbohydrates*

**QV06DD** *Amino acids, incl. combinations with polypeptides*

**QV06DE** *Amino acids/carbohydrates/minerals/vitamins, combinations*

**QV06DF** *Milk substitutes*

**QV06DX** *Other combinations of nutrients*

<b>QV07</b>	<b>ALL OTHER NON-THERAPEUTIC PRODUCTS</b>
<b>QV07A</b>	<b>ALL OTHER NON-THERAPEUTIC PRODUCTS</b>
	Solvents, diluents and solutions for blood transfusion preparations should be classified in this group. Auxiliary preparations for performing medical examinations, e.g. plain exploration creams and lubricants, are also classified in this group.
	The classifications are made according to the ATC system for human medicine.
<b>QV07AA</b>	<b><i>Plasters</i></b>
	Non-medicated adhesive plasters, surgical tapes etc. are classified in this group whereas liquid plasters are classified in QD02AD.
	See also QD09 - <i>Medicated dressings</i> .
<b>QV07AB</b>	<b><i>Solvents and diluting agents, incl. irrigating solutions</i></b>
	Sterile water products and solvents for diluting or dissolving active substance are classified in this group.
<b>QV07AC</b>	<b><i>Blood transfusion, auxiliary products</i></b>
	Citric acid/citrate/dextrose (ACD) solutions and similar preparations are assigned to this group.
<b>QV07AD</b>	<b><i>Blood tests, auxiliary products</i></b>
	Solutions used as diluents or transport media for blood samples are classified in this group.
<b>QV07AN</b>	<b><i>Incontinence equipment</i></b>
<b>QV07AQ</b>	<b><i>Other non-therapeutic veterinary products</i></b>
<b>QV07AR</b>	<b><i>Sensitivity tests, discs and tablets</i></b>
	Antibiotic discs, for example, may be classified in this group.
<b>QV07AS</b>	<b><i>Stomi equipment</i></b>
<b>QV07AT</b>	<b><i>Cosmetics</i></b>
<b>QV07AV</b>	<b><i>Technical disinfectants</i></b>
<b>QV07AX</b>	<b><i>Washing agents etc.</i></b>
<b>QV07AY</b>	<b><i>Other non-therapeutic auxiliary products</i></b>
	Exploration creams and lubricants should be classified in this group. Creams, which contain antiseptics, are classified in QD08 - <i>Antiseptics and disinfectants</i> . Preparations for the care of teats and udder are classified in QG52.
<b>QV07AZ</b>	<b><i>Chemicals and reagents for analysis</i></b>

## **QV08 CONTRAST MEDIA**

X-ray, MRI and Ultrasound contrast media are classified in this group.

The group is subdivided according to chemical structure.

QV08A X-RAY CONTRAST MEDIA, IODINATED

***QV08AA Watersoluble, nephrotropic, high osmolar X-ray contrast media***

***QV08AB Watersoluble, nephrotropic, low osmolar X-ray contrast media***

***QV08AC Watersoluble, hepatotropic, X-ray contrast media***

***QV08AD Non-watersoluble X-ray contrast media***

QV08B X-RAY CONTRAST MEDIA, NON-IODINATED

***QV08BA Barium sulfate containing X-ray contrast media***

QV08C MAGNETIC RESONANCE IMAGING CONTRAST MEDIA

***QV08CA Paramagnetic contrast media***

***QV08CB Superparamagnetic contrast media***

***QV08CX Other magnetic resonance imaging contrast media***

QV08D ULTRASOUND CONTRAST MEDIA

***QV08DA Ultrasound contrast media***

The microspheres may contain various ingredients. E.g. perflutren suspension in microspheres of phospholipids is classified in QV08DA04.

Perflenapent covers structural isomers of dodecafluoropentane i.e. perflisopent.

## **QV09 DIAGNOSTIC RADIOPHARMACEUTICALS**

An expert group has been responsible for the ATCvet classification of radiopharmaceuticals in QV09 and QV10. The group has also prepared guidelines on the classification of these products.

Radiopharmaceuticals for diagnostic use are classified in this group, while those for therapeutic use are classified in QV10. In general, 3rd level groups are defined by site of action or organ system, 4th level groups according to the radionuclide, while the 5th level code specifies the chemical substance involved. The ATCvet 5th level code defines the actual form essential in nuclear medicine procedures, which includes radionuclide and carrier molecule. Consequently, products on the market, which can often be regarded as intermediate products rather than ready-to-use radiopharmaceuticals, can be given more than one (5th level) ATCvet code, e.g. technetium ( $^{99m}\text{Tc}$ ) exometazime (QV09AA01) and technetium ( $^{99m}\text{Tc}$ ) labelled cells (QV09HA02).

ATCvet codes are not assigned for radionuclide precursors which are used only in the radiolabelling of another substance prior to administration.

QV09A	CENTRAL NERVOUS SYSTEM
	This group comprises preparations used in CNS investigations in diagnostic nuclear medicine.
<b>QV09AA</b>	<b><i>Technetium (<sup>99m</sup>Tc) compounds</i></b>
<b>QV09AB</b>	<b><i>Iodine (<sup>123</sup>I) compounds</i></b>
<b>QV09AX</b>	<b><i>Other central nervous system diagnostic radiopharmaceuticals</i></b>
QV09B	SKELETON
	This group comprises preparations used in bone imaging. Radiopharmaceuticals used for the investigation of bone marrow are classified in QV09D - <i>Hepatic and Reticulo endothelial system</i> .
<b>QV09BA</b>	<b><i>Technetium (<sup>99m</sup>Tc) compounds</i></b>
	This group comprises various technetium bisphosphonates and pyrophosohates.
QV09C	RENAL SYSTEM
	This group comprises preparations used for the visualisation of the kidneys and urinary tract and preparations for functional studies of the renal system.
<b>QV09CA</b>	<b><i>Technetium (<sup>99m</sup>Tc) compounds</i></b>
	This group comprises technetium compounds given intravenously. Technetium compounds used in aerosols for inhalation are classified in QV09E - <i>Respiratory system</i> . Technetium-succimer prepared as 'pentavalent' is classified in QV09I - <i>Tumour detection</i> .
<b>QV09CX</b>	<b><i>Other renal system diagnostic radiopharmaceuticals</i></b>
QV09D	HEPATIC AND RETICULO ENDOTHELIAL SYSTEM
	This group comprises radiopharmaceuticals for the imaging of liver, gall bladder, spleen, lymphatic system and bone marrow.
<b>QV09DA</b>	<b><i>Technetium (<sup>99m</sup>Tc) compounds</i></b>
	This group contains technetium iminodiacetic acid derivatives for cholescintigraphy.
<b>QV09DB</b>	<b><i>Technetium (<sup>99m</sup>Tc) particles and colloids</i></b>
	This group contains technetium colloidal and particle containing preparations for the scintigraphy of liver, spleen, lymphatic system and bone marrow. Also orally administered preparations used for gastrointestinal tract imaging (gastric emptying, reflux etc.) are classified in this group.
	Preparations containing larger particles that are used for lung perfusion studies are classified in QV09E - <i>Respiratory system</i> . Denaturated labelled erythrocytes for spleen scintigraphy are classified in QV09G - <i>Cardiovascular system</i> .
<b>QV09DX</b>	<b><i>Other hepatic and reticulo endothelial system diagnostic radiopharmaceuticals</i></b>

QV09E RESPIRATORY SYSTEM

This group comprises radiopharmaceuticals for the lung ventilation and lung perfusion studies.

**QV09EA *Technetium (<sup>99m</sup>Tc), inhalants***

Technetium preparations for inhalation are classified in this group. Preparations with other indications when given intravenously are classified according to such indications, e.g technetium-pentetate is classified in QV09C - *Renal system*.

**QV09EB *Technetium (<sup>99m</sup>Tc), particles for injection***

Preparations containing smaller particles or colloids that are used for RES function are classified in QV09D - *Hepatic and reticulo endothelial system*.

**QV09EX *Other respiratory system diagnostic radiopharmaceuticals***

QV09F THYROID

This group comprises radiopharmaceuticals used for thyroid imaging.

Thalliumchloride and technetium-sestamibi used for parathyroid imaging are classified in QV09G - *Cardiovascular system*.

**QV09FX *Various thyroid diagnostic radiopharmaceuticals***

Technetium-pertechnetate used for the scintigraphy of salivary glands and Meckels diverticulum is classified in this group. Technetium-pentavalent succimer used in medullary thyroid carcinoma is classified in QV09I - *Tumour detection*. Sodium iodide (<sup>131</sup>I) in low dose is classified here. Sodium iodide (<sup>131</sup>I) in high dose for therapy is classified in QV10X - *Other therapeutic radiopharmaceuticals*.

QV09G CARDIOVASCULAR SYSTEM

This group comprises radiopharmaceuticals for myocardial scintigraphy, ejection fraction measurements, and vascular disorders.

**QV09GA *Technetium (<sup>99m</sup>Tc) compounds***

Labelled cells (erythrocytes) for the investigation of cardiovascular function are classified in this group. No subdivision is made between *in vitro* or *in vivo* labelling.

Pertechnetate for thyroid imaging is classified in QV09F - *Thyroid*.

**QV09GB *Iodine (<sup>125</sup>I) compounds***

**QV09GX *Other cardiovascular system diagnostic radiopharmaceuticals***

QV09H INFLAMMATION AND INFECTION DETECTION

This group comprises agents for the detection of inflammation and infection. Labelled blood cells are classified in this group. Agents that are used for the labelling of these cells can also be classified elsewhere, e.g. technetium-exametazime is classified in QV09A - *Central nervous system*. No subdivision is made for the type of labelled cells (erythrocytes, granulocytes or autologous etc.).

**QV09HA** *Technetium (<sup>99m</sup>Tc) compounds*

**QV09HB** *Indium (<sup>111</sup>In) compounds*

**QV09HX** *Other diagnostic radiopharmaceuticals for inflammation and infection detection*

QV09I TUMOUR DETECTION

This group comprises monoclonal antibodies and other compounds used for tumour detection.

**QV09IA** *Technetium (<sup>99m</sup>Tc) compounds*

**QV09IB** *Indium (<sup>111</sup>In) compounds*

**QV09IX** *Other diagnostic radiopharmaceuticals for tumour detection*

Gallium-citrate used for non-specific tumour localisation is classified in QV09H - *Inflammation and infection detection*. Thallium-chloride used for tumour detection is classified in QV09G - *Cardiovascular system*. Iobenguane (<sup>131</sup>I) in low dose is classified here while high dose for therapy is classified in QV10X - *Other therapeutic radiopharmaceuticals*.

QV09X OTHER DIAGNOSTIC RADIOPHARMACEUTICALS

This group contains various diagnostic radiopharmaceuticals, which cannot be classified in the preceding groups.

**QV09XA** *Iodine (<sup>131</sup>I) compounds*

**QV09XX** *Various diagnostic radiopharmaceuticals*

QV10 THERAPEUTIC RADIOPHARMACEUTICALS

Radiopharmaceuticals for therapeutic use are classified in this group, while those for diagnostic use are classified in QV09 - *Diagnostic radiopharmaceuticals*.

See comments on QV09.

QV10A ANTIINFLAMMATORY AGENTS

This group comprises radiopharmaceuticals for the therapy of inflammatory processes.

***QV10AA Yttrium (<sup>90</sup>Y) compounds***

***QV10AX Other antinflammatory therapeutic radiopharmaceuticals***

This group comprises non-yttrium particulate radiopharmaceuticals for radiation synovectomy and intracavitary instillation.

QV10B PAIN PALLIATION (BONE SEEKING AGENTS)

This group comprises therapeutic radiopharmaceuticals used for pain palliation in bone malignancies.

***QV10BX Various pain palliation radiopharmaceuticals***

QV10X OTHER THERAPEUTIC RADIOPHARMACEUTICALS

This group contains various therapeutic radiopharmaceuticals, which cannot be classified in the preceding groups.

***QV10XA Iodine (<sup>131</sup>I) compounds***

Iodine (<sup>131</sup>I) sodiumiodine in low dose for diagnostic nuclear medicine is classified in QV09F - *Thyroid*.

Iobenguane (<sup>131</sup>I) in low dose for diagnostic nuclear medicine is classified in QV09I - *Tumour detection*.

***QV10XX Various therapeutic radiopharmaceuticals***

**V20 SURGICAL DRESSINGS**

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