

Introduction

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The eighth edition of the Indian Pharmacopoeia (IP 2018) is published by the Indian Pharmacopoeia Commission (IPC) in accordance with a designed plan by the Scientific Body of IPC, in fulfilment of the requirements of the Drugs and Cosmetics Act 1940 and Rules thereunder and completed through the untiring efforts of its members, Secretariat and Laboratory over a period of about two years. It supersedes the IP 2014 edition but any monograph of the earlier edition that does not figure in this edition continues to be official as stipulated in the Second Schedule of the Drugs and Cosmetics Act, 1940.

Presentation

The Indian Pharmacopoeia 2018 is presented in four volumes. Volume I contains the Notices, Preface, the Structure of the IPC, Acknowledgements, Introduction and the General Chapters. Volume II contains the General Notices, General Monographs on dosage forms, Monographs on drug substances, dosage forms and pharmaceutical aids (A to M). Volume III contains Monographs on drug substances, dosage forms and pharmaceutical aids (N to Z) followed by and distinguished by colour codes, Monographs on Vaccines and Immunosera for human use, Herbs and herbal products, Blood and blood-related products, Biotechnology Derived Therapeutic products, Allergen products and Radiopharmaceutical preparations, Volume IV contains Veterinary monographs and Index.

The scope of the Indian Pharmacopoeia has been extended to include products of biotechnology, herbs and herbal products, veterinary vaccines and additional antiretroviral drugs and formulations, inclusive of commonly used fixed-dose combinations. Standards for new drugs and drugs used under National Health Programmes and included in National List of Essential Medicines are added and the drugs as well as their formulations currently not used are omitted from this edition. The number of monographs of Drugs substances, Dosage forms, Excipients, Vaccines and Immunosera for Human use, Herbs and Herbal Products, Blood and Blood related products and Biotechnology Derived Therapeutic products have been increased in this edition. Monographs of Vaccines and Immunosera for Human use are also upgraded in view of the latest development of the technology in the field. Many general chapters such as Tablets, Capsules, Volumetric Glassware and Maintenance, Identification, Preservation and Disposal of Microorganism have been revised. The monographs on General Chapters such as Disintegration, Dissolution are also upgraded to harmonise with prevailing international

requirements. Some chapters such as Dimension of Hard Cellulose Capsule Shells, Hard Gelatin Capsule Shells, Taste and Odour, Granules, Approximate pH of Solutions, Monocyte activation test, Microbiological assay of vitamin B₁₂ activity, Microbiological assay of calcium pantothenate, Test for biological reactivity, *in vivo* as well as *in vitro*, Botanical Extract and Viral safety evaluation of biotechnology products derived from cell lines of Human or Animal origin are newly included as per the technological requirements.

Format

In an effort to make the pharmacopoeia more user-friendly, the design of the texts of the monographs and test methods are kept same. Cross-referencing has been avoided to make each monograph complete in itself, thus making it convenient to the user.

Pharmacopoeial Requirements

As in the past, this compendium provides a publicly available statement concerning the quality of a product that can be expected and demonstrated at any time throughout the accepted shelf-life of the article. The standards laid down represent the minimum with which the article must comply and it is for the manufacturer to ensure that the article is manufactured in accordance with Good Manufacturing Practices (GMPs). It is essential that sufficiently stringent limits are applied at the time of release of a batch of drug substance or drug product so that the pharmacopoeial standards are met until its expiry when stored under the storage conditions specified.

It must be noted that a valid interpretation of any requirement of the Indian Pharmacopoeia should be done in the context of the monograph as a whole, the relevant general monographs, where appropriate, the specified tests and methods of analysis including any reference to the relevant General Notices. Familiarity with the General Notices will facilitate the correct application of the requirements.

Changes

Keeping in view the essential requirement under the Drugs and Cosmetics Act, 1940 and Rules thereunder, the information on the category of a drug, and available usual strengths of dosage forms has been kept in this edition.

General chemical tests for identification of an article have been almost eliminated and more specific infrared, ultraviolet spectrophotometric and HPLC tests have been given emphasis. The concept of relying on published infrared spectra as a basis for identification has been continued.

The use of chromatographic methods has been greatly extended to cope up with the need for the specificity in assays and in particular, in assessing the nature and extent of impurities in drug substances and drug products. Most of the existing assays and related substances tests have been upgraded to liquid chromatography method in view to have the specificity and to harmonise with other International Pharmacopoeias to the extent necessary. The up-gradation in this edition covers all the amendments and errata released after publication of Addendum 2016 to IP-2014.

In most of the parenteral preparation and other monographs, the test for pyrogens involving the use of animals has been almost eliminated and replaced with Bacterial Endotoxin test. In some blood and blood related monographs, the Bacterial Endotoxin test has been incorporated. The test for Biological Reactivity, *in vivo*. Test for Biological reactivity, *in vitro* Microbiological Assay of Vitamin B₁₂ activity and Microbiological Assay of Calcium Pantothenate has been added.

More essential oils monographs, crude herbal drugs and extracts have been incorporated and also some existing monographs have been revised under the section Herbs and Herbal Products in volume III.

Three monographs on radiopharmaceutical preparations, 10 monographs on Blood and Blood related products, 06 monographs on Biotechnology Derived Therapeutic products, 02 new monograph on Vaccines and Immunosera for Human use and 15 monographs on Herbs and Herbal products have been added in Volume III of this edition.

A separate volume for veterinary monographs as Volume IV of this edition of Indian Pharmacopoeia has been designed to provide comprehensive information to those concerned with the quality control of veterinary medicines. 14 new veterinary monographs have been added in this volume. Several monographs on chemicals along with a number of monographs on veterinary vaccines, diagnostic, immunosera and surgical materials have been given place in this volume. Many monographs just on the basis of usual strengths and doses have been mentioned in this volume while complete monographs are mentioned in other volumes of IP.

The monograph on *Brucella Melitensis* (Strain Rev.1) Vaccine, Live; Canine Adenovirus Vaccine, Inactivated; Canine adenovirus vaccine, Live; Canine Contagious Hepatitis Vaccine, Live; Old Adjuvant Vaccine Against Pasturellosis in sheep and Goats & Rinderpest Vaccine, Live have been omitted. Any necessary corrections have been incorporated in this edition.

General Chapters

Volume I is devoted mainly to test methods that are applicable to all the articles of the pharmacopoeia and general information

pertaining to the quality requirements of medicinal substances. It also includes reference data such as reference spectra, typical chromatograms etc. The test methods reflect the sophistication of analytical methodology and instrumentation.

Analytical methods in general are in harmony with those adopted internationally for monitoring the quality of drugs. The steps taken for harmonization have been initiated by the need to cope with the increasing demand for drugs manufactured in the country to meet globally accepted standards.

Accordingly 10 new chapters have been introduced based on current technologies used by the stakeholders and harmonized with other international pharmacopoeias; like Dimensions of Hard Cellulose Capsule Shells, Monocyte Activation Test, Granules and Odour and Taste etc.

The trend towards controlling the microbial quality of all medicinal products has been recognized and the requirement regarding limits of microbial contamination, even of products for oral administration and topical application, so that adequate controls are exercised by the manufacturers by the adoption of GMPs has been continued.

General Chapter on Maintenance, identification, preservation and disposal of micro-organisms has been revised and a general chapter on Viral safety evaluation of biotechnology products derived from cell lines of Human or Animal origin has been included for the first time.

In the Herbs and Herbal products section, general chapter on Botanical Extract has been revised.

Monographs

The General Monographs for dosage forms of active pharmaceutical ingredients (APIs) are grouped together at the beginning of Volume II. They are followed by the monographs for the APIs, pharmaceutical aids and individual dosage forms, all in alphabetical order upto Volume III. Monographs for other articles of special nature such as vaccines and immunosera for human use, herbs and herbal products, blood and blood related products, biotechnology derived therapeutic products and radiopharmaceuticals preparations are given in separate sections in Volume III. Special emphasis has been given to veterinary monographs adding new ones and updating the existing monographs in volume IV.

A list of 220 new monographs included in the 2018 edition of the Indian Pharmacopoeia, is given below:

Admissions

General Chapters

2.2.23. Test for Biological Reactivity, *In Vitro*

2.2.24. Test for Biological Reactivity, <i>In Vivo</i>	Carmustine Carmustine Injection	Enalapril Maleate and Hydrochlorothiazide Tablets
2.2.25. Monocyte Activation Test	Cefdinir	Escitalopram Oxalate and Clonazepam Tablets
2.2.26. Microbiological Assay of Calcium Pantothenate	Cefdinir Oral Suspension Cefixime Dispersible Tablets	Esmolol Injection
2.2.27. Microbiological Assay of Vitamin B ₁₂ Activity	Cefuroxime Axetil and Potassium Clavulanate Tablets	Etodolac Prolonged-release Tablets
2.4.45. Odour and Taste	Cholecalciferol Concentrate (Powder Form)	Folic Acid and Methylcobalamin Tablets
5.8.2. Dimensions of Hard Cellulose Capsule Shells	Cilnidipine	Ganciclovir Ganciclovir Injection
2.2.28. Viral Safety Evaluation of Biotechnology products derived from cell lines of Human or Animal origin	Cilnidipine Tablets	Ganciclovir Oral Suspension
2.4.46. Approximate pH of Solutions	Cinacalcet Hydrochloride	Glibenclamide and Metformin Tablets
Granules (General Monographs for Dosage Forms)	Clindamycin Palmitate Hydrochloride Clindamycin Palmitate Hydrochloride Oral Suspension	Glycopyrrolate Glycopyrrolate Injection Glycopyrrolate Tablets
Monographs on drug substances, dosage forms and pharmaceutical aids	Clonidine Hydrochloride and Clorthalidone Tablets	Hydroxyurea Hydroxyurea Capsules
Abiraterone Acetate Tablets	Cyclobenzaprine Hydrochloride	Ibuprofen and Paracetamol Tablets
Aluminium, Magnesium and Simethicone Chewable Tablets	Cyclobenzaprine Tablets	Ibuprofen and Pseudoephedrine Hydrochloride Tablets
Aluminium, Magnesium and Simethicone Oral Suspension	Dacarbazine	Isoflurane
Ambrisentan	Dacarbazine Injection	Isotretinoin Gel
Ambrisentan Tablets	Daclatasvir Dihydrochloride	Latanoprost Eye Drops
Amiloride and Hydrochlorothiazide Tablets	Dapoxetine Tablets	Latanoprost and Timolol Ophthalmic Solution
Amlodipine and Benazepril Hydrochloride Capsules	S-Dapoxetine Hydrochloride	Letrozole
Aprepitant	S-Dapoxetine Tablets	Letrozole Tablets
Aprepitant Capsules	Dapsone Gel	Levetiracetam Tablets
Armodafinil	Darifenacin Hydrobromide	Levodopa and Carbidopa Prolonged-release Tablets
Artesunate Injection	Darifenacin Prolonged-release Tablets	Levofloxacin Oral Solution
Atenolol and Clorthalidone Tablets	Darunavir Ethanolate	Lignocaine
Atorvastatin and Fenofibrate Tablets	Darunavir Tablets	Lignocaine and Prilocaine Cream
Azelnidipine Tablets	Diclofenac Diethylamine	Lignocaine Hydrochloride Topical Solution
Bisoprolol Fumarate	Diclofenac Sodium and Paracetamol Tablets	Lignocaine Oral Topical Solution
Bisoprolol Fumarate and Hydrochlorothiazide Tablets	Diclofenac Gel	Lorcaserin Hydrochloride Hemihydrate
Bosentan Monohydrate	Diethylene Glycol Monoethyl Ether	Lorcaserin Tablets
Bosentan Tablets	Dinoprostone	Magaldrate and Simethicone Chewable Tablets
Calcium and Vitamin D ₃ Tablets	Dinoprostone Oral Solution	Magaldrate and Simethicone Oral Suspension
Captopril and Hydrochlorothiazide Tablets	Diphenoxylate Hydrochloride and Atropine Sulphate Tablets	Mefenamic Acid and Dicyclomine Hydrochloride Tablets
	Dopamine Hydrochloride and Dextrose Injection	
	Dothiepin Tablets	

Memantine Hydrochloride	Oxymetazoline Hydrochloride Nasal Solution	Telmisartan and Hydrochlorothiazide Tablets
Memantine Tablets	Oxymetazoline Hydrochloride	Terbinafine Hydrochloride
Mesna	Paliperidone	Terbinafine Cream
Metadoxine	Pantoprazole Gastro-resistant and Domperidone Prolonged-release Capsules	Terbinafine Tablets
Metformin Hydrochloride Prolonged-release and Glimepiride Tablets	Paracetamol and Caffeine Tablets	Thioguanine
Methylcobalamin	Paroxetine Hydrochloride Hemihydrate	Thioguanine Tablets
Methyl dopa and Hydrochlorothiazide Tablets	Phenylephrine Eye Drops	Ticagrelor
Metoprolol Succinate Prolonged-release and Amlodipine Besilate Tablets	Phenylephrine Hydrochloride and Chlorpheniramine Maleate Drops	Tobramycin and Fluorometholone Acetate Ophthalmic Suspension
Metoprolol Tartrate and Hydrochlorothiazide Tablets	Phenylephrine Hydrochloride and Chlorpheniramine Maleate Syrup	Tobramycin Inhalation Solution
Montelukast Granules	Phytomenadione	Trimetazidine Tablets
Montelukast Sodium and Levocetirizine Hydrochloride Tablets	Phytomenadione Injection	Trospium Chloride Tablets
Mycophenolate Mofetil Oral Suspension	Piperacillin and Tazobactam Injection	Voriconazole Injection
Mycophenolate Mofetil Tablets	Piroxicam Tablets	Xylometazoline Hydrochloride and Sorbitol Nasal Drops
Nadifloxacin	Pregabalin and Methylcobalamin Capsules	Zolpidem Tartrate Prolonged-release Tablets
Nadifloxacin Cream	Prilocaine	Zonisamide Capsules
Nadifloxacin Gel	Procarbazine Hydrochloride Capsules	Antibiotic
Nitroglycerin Injection	Propylene Glycol Monocaprylate	Gentamicin Cream
Norethisterone and Ethinyl Estradiol Tablets	Quinapril Hydrochloride	Gentamicin Ointment
Norgestimate	Quinapril and Hydrochlorothiazide Tablets	Radiopharmaceutical
Norgestimate and Ethinyl Oestradiol Tablets	Repaglinide and Metformin Tablets	Gallium (⁶⁸ Ga) Chloride solution for Radiolabelling
Ofloxacin and Ornidazole Tablets	Risedronate Sodium Tablets	Sodium Iodide (¹²³ I) Injection (From ¹²⁴ Xe)
Olanzapine and Fluoxetine Tablets	Ropivacaine Hydrochloride	Sodium Iodide (¹²³ I) Solution for Radiolabelling
Olmesartan Medoxomil and Hydrochlorothiazide Tablets	Ropivacaine Injection	Herbal
Omeprazole and Domperidone Capsules	Rosuvastatin Calcium and Ezetimibe Tablets	Amarbel
Olopatadine Hydrochloride	Rosuvastatin and Fenofibrate Tablets	Anise Oil
Olopatadine Ophthalmic Solution	Sertaconazole Nitrate	Belladonna Dry Extract Tablets
Olopatadine Tablets	Sertaconazole Nitrate and Beclomethasone Dipropionate Cream	Citronella Oil (Geraniol type)
Oxaliplatin	Sodium Alendronate Trihydrate	Citronella Oil (Java type)
Oxaliplatin Injection	Sucralfate	Green Coffee Bean Extract
Oxybutynin Hydrochloride	Sucralfate Tablets	Horse Chestnut Dry Extract
Oxybutynin Prolonged-release Tablets	Tamsulosin Hydrochloride Prolonged-release and Dutasteride Capsules	Juniper Oil
	Tazobactam	Mandarin Oil
	Telmisartan and Amlodipine Tablets	Milk Thistle
		Milk Thistle Dry Extract

Schisandra Dry Extract	Cefuroxime Intramammary Infusion	Pertussis and Inactivated Poliomyelitis Vaccine
Schisandra Fruit	Cephalexin Intrauterine Powder for Suspension	Adsorbed Diphtheria, Tetanus, Pertussis, Inactivated Poliomyelitis Vaccine and <i>Haemophilus influenzae</i> Type b Conjugate Vaccine
Sweet Orange Oil	Cephalexin Veterinary Oral Powder	Adsorbed Diphtheria, Tetanus, Pertussis and (Acellular Component) Poliomyelitis (Inactivated) Vaccine.
Tvak	Enrofloxacin Injection	Adsorbed Diphtheria, Tetanus, Pertussis, Poliomyelitis (Inactivated) and <i>Haemophilus influenzae</i> Type b Conjugate Vaccine
Vaccines and Immunoserum for Human Use	Marbofloxacin Injection	Allopurinol Tablets
Pneumococcal polysaccharide conjugate vaccine (Adsorbed)	myo-Inositol	Aluminium Hydroxide Gel
Scorpion Venom Antiserum	Oxytetracycline Hydrochloride Injection	Amoxicillin Capsules
Biotechnology Derived Therapeutic Products	Sodium Acid Phosphate Injection	Amoxicillin Dispersible Tablets
Follicle Stimulating Hormone Concentrated Solution	Trimethoprim and Sulphamethoxazole Injection	Amoxicillin Injection
Follicle Stimulating Hormone Injection	Up-gradation	Amoxicillin Oral Suspension
Follicle Stimulating Hormone	General Chapters upgraded:	Amoxicillin Sodium
Interferon β -1a Injection	2.1.6. Volumetric Glassware	Amoxicillin Trihydrate
Teriparatide	2.2.3. Bacterial Endotoxins	Ampicillin Capsules
Teriparatide injection	2.2.15. Host Cell Proteins and Host Cell DNA	Ampicillin Injection
Blood and Blood Related Products	2.2.20. Maintenance, Identification, Preservation and Disposal of Microorganisms	Ampicillin Oral Suspension
Anti-D (IgM) monoclonal blood grouping reagent	2.3.9. Aluminium in Adsorbed Vaccines	Ampicillin Sodium
Blood Grouping Reagent Anti-Fy ^a , Anti-Fy ^b	2.3.30. Nitrogen	Ampicillin Trihydrate
Blood Grouping Reagent Anti-Jk ^a , Anti-Jk ^b	2.4.9. Conductivity	Ampicillin Veterinary Oral Powder
Blood Grouping Reagent Anti-K, Anti-k	2.5.1. Disintegration Test	Amprolium Hydrochloride
Blood Grouping Reagent Anti-M, Anti-N	2.5.2. Dissolution Test	Anthrax Spore Vaccine, Live
Blood Grouping Reagents Anti P₁	5.8.1. Dimensions of Hard Gelatin Capsule Shells	Anti-D (Rho) Immunoglobulin
Blood Grouping Reagents Anti-Le ^a , Anti-Le ^b	Vaccines: General Requirements	Arjuna Dry Extract
Blood Grouping Reagents Anti-S, Anti-s	Veterinary Diagnostics	Atracurium Besylate Injection
Blood Grouping Lectins Anti-H	Veterinary Immunoserum	Avian Infectious Bronchitis Vaccine, Inactivated
Blood Grouping Lectins Anti-A ₁	Veterinary Vaccines: General Requirements	Avian Infectious Bronchitis Vaccine, Live
Veterinary Non-biological	Monographs on drug substances, dosage forms and pharmaceutical aids given below have been upgraded:	Avian Infectious Laryngotracheitis Vaccine, Live
Albendazole Veterinary Oral Powder	Abiraterone Acetate	Avian Mycoplasma Antigen
Amoxicillin Tablets	Acepromazine Maleate	Azathioprine Tablets
Amprolium Oral Powder	Acepromazine Injection	Bacillus Calmette-Guerin Vaccine (Freeze-Dried)
Buparvaquone	Aciclovir	Bacitracin
Buparvaquone Injection	Adrenaline	Bacitracin Zinc
	Adrenaline Tartrate	Bambuterol Hydrochloride
	Adsorbed Diphtheria, Tetanus,	

Bambuterol Tablets	Cetrimide Cream	Diphtheria, Tetanus, Pertussis (Whole Cell), Hepatitis B (rDNA) and <i>Haemophilus influenzae</i> Type b Conjugate Vaccine (Adsorbed)
Batamethasone Cream	Cetrimide Emulsifying Ointment	Dipyridamole
BCG Immunotherapy	Chlorthalidone	Disopyramide Phosphate Capsules
Bendamustine Injection	Cholecalciferol	Disopyramide Phosphate Prolonged-release Capsules
Benzathine Penicillin	Cholera Vaccine (Inactivated, Oral)	Divalproex Prolonged-release Tablets
Benzathine Penicillin Injection	Clarithromycin Tablets	Divalproex Sodium
Benzhexol Tablets	Classical Swine Fever Vaccine, Live	Docetaxel Anhydrous
Benzyl Alcohol	Clobazam Tablets	Doxofylline
Benzyl Benzoate	Clobetasone Cream	Doxorubicin Injection
Betamethasone Valerate Cream	Clomifene Citrate	Duloxetine Gastro-resistant Tablets
Bhibhitaki	Clotrimazole Cream	Egg Drop Syndrome'76 (Adenovirus) Vaccine, Inactivated
Bifonazole Cream	Clotrimazole Pessaries	Enrofloxacin
Biphasic Insulin Lispro Injection	Clonidine Tablets	Enterotoxaemia Vaccine, Inactivated
Blackquarter Vaccine	Closantel Sodium Dihydrate	Ergotamine Injection
Brimonidine Tartrate Eye Drops	Crospovidone	Esmolol Hydrochloride
Brucella Abortus (Strain 19 Vaccine) Vaccine, Live	Crotamintol	Ethacrynic Acid
Bumetamide Injection	Cyclosporine	Ethanolamine
Butylparaben	Daruharidra Roots	Etoposide
Calcitonin (Salmon) Injection	Decoquinatone	Fibrin Sealant Kit filgrastin concentrated solution
Calcium Folate (Leucovorin Ca)	Desferrioxamine Injection	Fenspiride Hydrochloride
Calcium Magnesium Borogluconate Injection	Dexamethasone Sodium Phosphate	Finasteride
Calcium Stearate	Dexamethasone Tablets	Finasteride Tablets
Canine Adenovirus Vaccine, Live	Dexlansoprazole	Foot and Mouth Disease Vaccine, Inactivated
Canine Coronavirus Vaccine, Inactivated	Diazoxide	Flucloxacillin Oral Solution
Canine Distemper Vaccine, Live	Diclazuril	Fortified Benzathine Penicillin Injection
Canine Infectious Contagious Hepatitis Vaccine, Inactivated	Dichlorophen Tablets	Folic Acid
Canine Parainfluenza Virus Vaccine, Live	Diclofenac Prolonged-release Tablets	Fortified Procaine Penicillin Injection
Canine Parvovirus Vaccine, Inactivated	Dicloxacillin Sodium	Fosinopril Sodium
Canine Parvovirus Vaccine, Live	Diloxanide Furoate	Fowl Cholera Vaccine, Inactivated
Caprofen	Diluted Pentaerythritol Tetranitrate	Fowl Pox Vaccine, Live
Carboxymethylcellulose Sodium	Dimethicone	Fructose Injection
Carnauba Wax	Dinitolamide	Frusemide Tablets
Cefoperazone Injection	Diphtheria Vaccine (Absorbed)	Furazolidone
Cefoperazone Sodium	Diphtheria, Tetanus and Pertussis Vaccine (Adsorbed)	Gabapentin Capsules
Cefoperazone Sodium Intramammary Suspension	Diphtheria, Tetanus, Pertussis (Whole Cell) and <i>Haemophilus influenzae</i> Type b Conjugate Vaccine (Adsorbed)	Gemcitabine Hydrochloride
Cefotaxime Sodium Injection	Diphtheria, Tetanus, Pertussis (Whole Cell) and Hepatitis B (rDNA) Vaccine (Adsorbed)	Ginkgo Dry Extract
Cetirizine Hydrochloride		Ginkgo Tablets
Cefpodoxime Tablets		Glibenclamide Tablets

Gliclazide	Insulin Glargine	Methylprednisolone
Gliclazide Tablets	Insulin Glargine Injection	Metolazone Tablets
Glucosamine Sulphate Sodium Chloride	Ivermectin Injection	Metoprolol Succinate
Goat Pox Vaccine, Live	Ivermectin Oral Paste	Metoprolol Succinate Prolonged-release Tablets
Guggulipid	Ivermectin Pour on	Metoprolol Tartrate
Guggulipid Tablets	Japanese Encephalitis Live Vaccine (Human)	Metronidazole Benzoate Oral Suspension
Guggul Resin	Japanese Encephalitis Vaccine (Human)	Metronidazole Injection
Haemorrhagic Septicaemia Vaccine, Inactivated	Japanese Encephalitis Vaccine Inactivated (Adsorbed, Human)	Mometasone Cream
Heparin Injection	Ketorolac Tromethamine	Mometasone Ointment
Heparin Sodium	Labetalol Injection	Moxidectin
Hepatitis A (Inactivated) and Hepatitis B (rDNA) Vaccine (Adsorbed)	Lactic Acid	Myristic Acid
Human Albumin	Latanoprost	Nifedipine Prolonged-release Tablets
Human Normal Immunoglobulin	Levamisole Injection	Nitroxynil Injection
Human Normal Immunoglobulin for Intravenous use	Levetiracetam	Ofloxacin
Human Plasma Protein Fraction	Levocetirizine Tablets	Ofloxacin Oral Suspension
Hydrochlorothiazide	Levodropropizine	Ofloxacin Tablets
Hydrochlorothiazide Tablets	Levofloxacin Infusion	Olmesartan Medoxomil
Hydroxychloroquine Tablets	Levofloxacin Injection	Ondansetron Hydrochloride
Hydroxypropylmethyl Cellulose	Levonorgestrel and Ethinylloestradiol Tablets	Ondansetron Orally Disintegrating Tablets
Hyoscine Butylbromide	Levosaltamol Sulphate	Oral Rehydration Salts
Hyoscine Butylbromide Injection	Liquid Maltitol	Orphenadrine Citrate
Hyoscine Butylbromide Tablets	Marek's Disease Vaccine, Live	Orphenadrine Hydrochloride
Hyoscine Hydrobromide	Measles and Rubella Vaccine (Live)	Oxytetracycline Hydrochloride Injection
Hyoscyamine Sulphate	Measles Vaccine (Live)	Oxytetracycline Dihydrate Injection
Ifosfamide Injection	Measles, Mumps and Rubella Vaccine (Live)	Oxytocin
Imipenem	Mebendazole	Oxytocin Injection
Inactivated Hepatitis A Vaccine (Adsorbed)	Mebendazole Tablets	Paracetamol Infusion
Inactivated Hepatitis B Vaccine	Medroxyprogesterone Injection	Paroxetine Hydrochloride
Inactivated Influenza Vaccine (Split Virion)	Menotropin for Injection	Pegfilgrastim
Inactivated Influenza Vaccine (Surface Antigen)	Meropenem	Pemetrexed Injection
Inactivated Influenza Vaccine (Whole Virion)	Mesalazine	Penicillamine Tablets
Isoprenaline	Mesalazine Prolonged-release Tablets	Pentobarbitone Sodium
Isoprenaline Injection	Metformin Hydrochloride	Pertussis Vaccine.
Isopropyl Palmitate	Metformin Tablets	Peste Des Petits Ruminants Vaccine, Live
Isosorbide Dinitrate Tablets	Methi	Pethidine Injection
Isoxsuprine Hydrochloride	Methocarbamol	Phenindione
Isoxsuprine Injection	Methotrexate	Phenindione Tablets
	Methotrexate Tablets	Phenoxyethanol
	Methoxamine Hydrochloride	Phenylephrine Hydrochloride
	Methyldopa	Pimozide

Piperacillin	Tacrolimus Capsules	Changed Titles of Monographs
Piperazine Citrate	Tamsulosin Hydrochloride Prolonged-release Capsules	From Benzoyl Peroxide to Hydrous Benzoyl Peroxide
Poliomyelitis Vaccine (Inactivated)	Teicoplanin	From Fasterodine Fumarate to Fesoterodine Fumarate
Poliomyelitis Vaccine, Live (Oral)	Tetanus Veterinary Vaccine	From Gugulipid Tablets to Gugglipid Tablets
Procaine Hydrochloride	Theileriosis Vaccine, Live	From 'Gugulipid' to 'Guggulipid'
Progesterone	Theophylline Injection	From 'Labetalol' to 'Labetalol Injection'
Promazine Tablets	Thiopentone Injection	From 'Sulphadimidine Tablets' to 'Sulphadimidine Bolus Tablets'
Promethazine Syrup	Thiopentone Sodium	
Quinine Sulphate	Thymol	Monographs shifted from Chemical to Biotechnology Derived Therapeutic Products
Rabeprazole Injection	Tick-borne Encephalitis Vaccine (Inactivated).	Calcitonin (Salmon)
Rabies Vaccine, Human	Tolazamide Tablets	Calcitonin (Salmon) Injection
Ranitidine Injection	Triamcinolone Acetonide Injection	Human Insulin
Ranitidine Oral Solution	Triamcinolone Tablets	Insulin Injection
Ritodrine Injection	Triethyl Citrate	Insulin Aspart
Ritonavir	Tribasic Calcium Phosphate	Insulin Aspart Injection
Ronidazole	Triflupromazine Hydrochloride Injection	Insulin Lispro
Ronidazole Veterinary Oral Powder	Trospium Chloride	Insulin Lispro Injection
Rotavirus Vaccine (Live Attenuated, Oral)	Tylosin	Biphasic Insulin Aspart Injection
Roxithromycin	Tylosin Injection	Biphasic Insulin Lispro Injection
Rubella Vaccine (Live)	Tylosin Tablets	Biphasic Isophane Insulin Injection
Saccharin Sodium	Typhoid (Strain Ty 21a) Vaccine, Live (Oral)	Isophane Insulin Injection
Salmonella Pullorum Coloured Antigen	Typhoid Vaccine (Freeze Dried)	Insulin Glargine
Salmonella Vaccine, Inactivated	Typhoid Vaccine	Insulin Glargine Injection
Somatropin	Typhoid Vi Conjugate Vaccine	
Somatropin Concentrated Solution	Typhus Vaccine	Omissions
Somatropin for Injection	Valproic Acid	General Monographs (Veterinary)
Senna Dry Extract	Vancomycin Hydrochloride for Intravenous Infusion	Dip Concentrate
Senna Leaf	Vancomycin Hydrochloride	Premixes
Senna Pods	Varicella Vaccine, Live	Veterinary Aerosols
Senna Tablets	Vecuronium Bromide	Teat Dips
Sheep Pox Vaccine, Live Attenuated	Vinblastin Sulphate	Teat Sprays
Sildenafil Citrate	Water for Injections in Bulk	Udder Washes
Sitagliptin Phosphate	Zidovudine	
Sodium Acetate	Zinc Oxide and Salicylic Acid Paste	Brucella Melitensis (Strain Rev. 1) Vaccine, Live
Sodium Phosphate	Zolmitriptan Nasal Spray	Canine Adenovirus Vaccine, Inactivated
Sodium Valproate	Zolmitriptan Tablets	Canine Adenovirus Vaccine, Live
Sorbitan Oleate		Canine Contagious Hepatitis Vaccine, Live
Spectinomycin Hydrochloride	Changed Titles	Old Adjuvant Vaccine Against Pasturellosis in Sheep and Goats
Spectinomycin Injection	Changed Titles of General Chapters	Rinderpest Vaccine, Live
Spiramycin	From '5.8 Dimension of Hard Gelatin Capsule Shells' to '5.8 Dimension of Capsule Shells'	Sterile Diluent for Live Vaccines
Sterile Diluent for live Vaccine		
Sulphamethoxazole and Trimethoprim Bolus		
Tacrolimus		

