# BRITISH PHARMACOPŒIA 1963

Published under the direction of the GENERAL MEDICAL COUNCIL

pursuant to the Medical Act 1956



Official from 1 January 1964

LONDON

Published for the

GENERAL MEDICAL COUNCIL

The Pharmaceutical Press The Square London were

Copyright © 1963 by the General Medical Council

Made and printed in Great Britain by
William Clowes and Sons, Limited, London and Beccles

### BRITISH PHARMACOPŒIA 1963

#### APPROVED NAMES

Approved Names are non-proprietary names for medicinal substances devised or selected by the British Pharmacopæia Commission and published from time to time by the General Medical Council. Approved Names are used in the titles of many monographs on substances and preparations in the Pharmacopœia.

This leaflet provides: (a) a list of the Approved Names used in the titles of monographs included in the Pharmacopæia for the first time by means of the 1963 edition, and (b) an index of proprietary and other names of the substances and preparations.

APPROVED NAME

OTHER NAMES

BENDROFLUAZIDE 3-Benzyl-3,4-dihydro-6-trifluoromethylbenzo-1,2,4-

thiadiazine-7-sulphonamide 1,1-dioxide

Aprinox; Centyl; Neo-Naclex Alkylbenzyldimethylammonium chlorides BRNZALKONIUM CHLORIDE

P.R.Q. Antiseptic; Roccal; Zephiran BENZTROPINE 3-Diphenylmethoxytropane

Cogentin is the methanesulphonate

CARAMIPHEN 2-Diethylaminoethyl 1-phenylcyclopentane-1-

carboxylate

Parpanit is the hydrochloride; Taoryl is the ethanedisulphonate

CETYLPYRIDINIUM CHLORIDE 1-Hexadecylpyridinium chloride

Ceepryn CHLORAMBUCIL γ-4-Di-(2-chloroethyl)aminophenylbutyric acid

Leukeran

CHLORPHENESIN 3-(4-Chlorophenoxy)propane-1,2-diol

Mycil

CHLORPHENIRAMINE 1-(4-Chlorophenyl)-3-dimethylamino-1-2'-pyridyl-

Chlorprophenpyridamine

Chlor-Trimeton and Piriton are the hydrogen maleste CHLORPROPAMIDE

N-4-Chlorobenzenesulphonyl-N'-propylurea

Diabinese

CROTAMITON N-Crotonoyl-N-ethyl-o-toluidine

CYCLIZINE 1-Methyl-4-a-phenylbenzylpiperazine

Marzine is the hydrochloride; Valoid is the hydro-

chloride or the lactate

CYCLOMETHYCAINE 3-(2-Methylpiperidino)propyl 4-cyclohexyloxy-

Surfathesin is the sulphate CYCLOSERINE D-4-Aminoisoxazolid-3-one

DEQUALINIUM CHLORIDE

Seromycin

DEMETHYLCHLORTETRACYCLINE 7-Chloro-4-dimethylamino-1,4,4a,5,5a,6,11,12a-

octahydro-3,6,10,12,12a-pentahydroxy-1,11-

dioxonaphthacene-2-carboxyamide

Declomycin; Ledermycin

Decamethylenedi-(4-aminoquinaldinium chloride)

Dequadin

DEXAMETHASONE 9α-Fluoro-11β,17α,21-trihydroxy-16α-methylpregna-1,4-diene-3,20-dione

9α-Fluoro-16α-methylprednisolone

Decadron; Deronil; DexaCortisyl; Dextelan;

Millicorten: Oradexon

(2)APPROVED NAME OTHER NAMES (+)-3-Methoxy-N-methylmorphinan DEXTROMETHORPHAN Romilar is the hydrobromide 4,5-Dichlorobenzene-1,3-disulphonamide DICHLORPHENAMIDE Daranide DIETHAZINE 10-(2-Diethylaminoethyl)phenothiazine Diparcol is the hydrochloride DILOXANIDE 4-(N-Methyldichloroacetamido)phenol Entamide; Furamide is the 2-furoate Diphenhydramine salt of 8-chlorotheophylline DIMENHYDRINATE Dramamine DIMETHISTERONE 17β-Hydroxy-6α,21-dimethyl-17α-pregn-4-en-20-yn-3-one 6a,21-Dimethylethisterone Secrosteron DIPIPANONE 4,4-Diphenyl-6-piperidinoheptan-3-one Pipadone is the hydrochloride DITOPHAL Diethyl dithiolisophthalate Etisul DOMIPHEN BROMIDE Dodecyldimethyl-2-phenoxyethylammonium bromide Bradosol EDROPHONIUM CHLORIDE Ethyl-(3-hydroxyphenyl)dimethylammonium chloride Tensilon Erythromycin propionyl ester lauryl sulphate ERYTHROMYCIN ESTOLATE Ilosone ETHOTOIN 3-Ethyl-5-phenylhydantoin Peganone FLUDROCORTISONE 9α-Fluoro-11β,17α,21-trihydroxypregn-4-ene-3,20-dione 9a-Fluorohydrocortisone Alflorone, Florinef, and Fludrocortone are the 21-acetate FI.UOXYMESTERONE 9α-Fluoro-11β,17β-dihydroxy-17α-methylandrost-4-en-3-one 9α-Fluoro-11β-hydroxy-17α-methyltestosterone Ultandren GLUTETHIMIDE α-Ethyl-α-phenylglutarimide Doriden GRISEOFULVIN 7-Chloro-4,6-dimethoxycoumaran-3-one-2-spiro-1'-(2'-methoxy-6'-methylcyclohex-2'-en-4'-one) Fulcin; Grisovin GUANETHIDINE 1-(2-Guanidinoethyl)azacyclo-octane Ismelin is the sulphate HEXACHLOROPHANE Di-(3,5,6-trichloro-2-hydroxyphenyl)methane Hexachlorophene HYDRALLAZINE 1-Hydrazinophthalazine Hydralazine Apresoline is the hydrochloride HYDROCHLOROTHIAZIDE 6-Chloro-3,4-dihydrobenzo-1,2,4-thiadiazine-7sulphonamide 1,1-dioxide Dichlotride; Direma; Esidrex; Hydril; Hydrodiuril;

Hydrosaluric

HYDROFLUMETHIAZIDE 3,4-Dihydro-6-trifluoromethylbenzo-1,2,4thiadiazine-7-sulphonamide 1.1-dioxide

HYDROXOCOBALAMIN

Di-Ademil: Hydrenox; Naclex; Rontyl α-(5,6-Dimethylbenzimidazolyl)hydroxocobamide

Hydrovit; Neo-Cytamen

**IMIPRAMINR** 1-(3-Dimethylaminopropyl)-4,5-dihydro-2,3:6,7dibenzazepine

Tofranil is the hydrochloride

IODIPAMIDE NN'-Di-(3-carboxy-2,4,6-tri-iodophenyl)adipamide

Biligrafin and Endografin are the bis-N-methyl-

glucamine salt

(2) OTHER NAMES APPROVED NAME Ethyl 10-(4-jodophenyl)undecanoate IOPHENDYLATE

Emiodan: Myodil ISOPHANE INSULIN

reophane Insulin (NPH) NPH Insulin

LEVALLORPHAN -)-N-Allyl-3-hydroxymorphinan Lorfan is the hydrogen tartrate

I PVORPHANOL (-)-3-Hydroxy-N-methylmorphinan Levorphan

Dromoran is the hydrogen tartrate

3-Methylaminoisocamphane MECAMYLAMINE

Inversine and Mevasine are the hydrochloride MECLOZINE 1-(4-Chloro-α-phenylbenzyl)-4-(3-methylbenzyl)piperazine

Ancolan is the dihydrochloride

2-[4-(4,6-Diamino-1,3,5-triazin-2-ylamino)phenyl]-MELARSOPROL

4-hydroxymethyl-1,3,2-dithiarsolan Mel B

Naa-Trimethylphenethylamine MEPHENTERMINE

Mephine is the sulphate MEPROBAMATE 2,2-Di(carbamoyloxymethyl)pentane

Equanil; Mepavlon; Miltown

17β-Hydroxy-17α-methylandrosta-1,4-dien-3-one METHANDIENONE Dianabol

MRTHICILLIN 6-(2,6-Dimethoxybenzamido)penicillanic acid Celbenin and Staphcillin are the sodium salt

METHYLPREDNISOLONE 118,17a,21-Trihydroxy-6a-methylpregns-1.4-diene-

3,20-dione 6a-Methylprednisolone

Medrol; Medrone; Metastab

METHYPRYLONE 3,3-Diethyl-5-methyl-2,4-dioxopiperidine Noludar

NANDROLONE

17β-Hydroxyœstr-4-en-3-one

17B-Hydroxy-19-norandrost-4-en-3-one

Deca-Durabolin is the decanoate; Durabolin is the

phenylpropionate 1-(5-Nitro-2-furfurylideneamino)hydantoin NITROFURANTOIN

Furadantin 17α-Ethyl-17β-hydroxyæstr-4-en-3-one NORETHANDROLONE

17α-Ethyl-17β-hydroxy-19-norandrost-4-en-3-one

NORETHISTERONE 17α-Ethynyl-17β-hydroxyœstr-4-en-3-one

178-Hydroxy-19-norpregn-4-en-20-yn-3-one

17α-Ethynyl-19-nortestosterone

Primolut N; Norlutin-A is the acetate Narcotine

NOSCAPINE Coscopin: Nicolane

NYSTATIN An antibiotic produced by Streptomyces noursei

Mycostatin

PEMPIDINE 1,2,2,6,6-Pentamethylpiperidine

Perolysen and Tenormal are the hydrogen tartrate PENTAERYTHRITOL

TETRANITRATE

2,2-Bishydroxymethylpropane-1,3-diol tetranitrate Pentaerithrityl Tetranitrate

Mycardol; Peritrate 2-Chloro-10-{3-[4-(2-hydroxyethyl)piperazin-1-yl]-PERPHENAZINE

propyl) phenothiazine

Fentazin; Trilafon 4,7-Phenanthroline-5,6-quinone PHANOUONE

Entobex

PHENELZINE Phenethylhydrazine

Nardil is the hydrogen sulphate

PHENOXYBENZAMINE 2-(N-Benzyl-2-chloroethylamino)-1-phenoxypropane Dibenyline and Diber zvline are the hydrochloride

(4)						
APPROVED NAME	OTHER NAMES					
PHENTOLAMINE	2-N-(3-Hydroxyphenyl)-p-toluidinomethyl-2-					
	imidazoline					
	Rogitine is the hydrochloride or the methane-					
PHENYLBUTAZONE	sulphonate 4-n-Butyl-1,2-diphenylpyrazolidine-3,5-dione					
***************************************	Butazolidin					
PHOLCODINE	2-Morpholinoethyl ether of morphine					
	3-(2-Morpholinoethyl)morphine Ethnine					
Piperocaine	3-(2-Methylpiperidino)propyl benzoate					
	Metycaine is the hydrochloride					
Prochlorperazine	2-Chloro-10-[3-(4-methylpiperazin-1-yl)propyl]-					
	phenothiazine Compazine is the dimaleate or the ethanedisulphonate;					
	Stemetil is the dimaleate or the methanesulphonate					
PROMAZINE	10-(3-Dimethylaminopropyl)phenothiazine					
PROMETHAZINE THEOCLATE	Sparine is the embonate or the hydrochloride					
PROMETHAZINE THEOCLATE	Promethazine salt of 8-chlorotheophylline Promethazine chlorotheophyllinate					
	Avomine					
SODIUM ACETRIZOATE	Sodium 3-acetamido-2,4,6-tri-iodobenzoate					
SODIUM ANOXYNAPHTHONATE	Diaginol Sodium 4'-anilino-8-hydroxy-1,1'-azonaphthalans					
BODIOM TENOMINATIONALE	3,6,5'-trisulphonate					
	Coomassie Blue					
SODIUM CALCIUMEDETATE	Calcium chelate of the disodium salt of ethylenedi-					
	amine-NNN'N'-tetra-acetic acid Calcium Disodium Versenate					
SODIUM DIATRIZOATE	Sodium 3,5-diacetamido-2,4,6-tri-iodobenzoate					
0	Hypaque					
Sulphafurazole	5-(4-Aminobenzenesulphonamido)-3,4- dimethylisoxazole					
	Gantrisin					
Sulphamethizole	2-(4-Aminobenzenesulphonamido)-5-methyl-1,3,4-					
	thiadiazole					
Sulphamethoxypyridazine	Urolucosil 3-(4-Aminobenzenesulphonamido)-6-methoxy-					
	pyridazine					
Con management	Kynex; Lederkyn; Midicel					
Sulphasomidine	6-(4-Aminobenzenesulphonamido)-2,4-dimethyl- pyrimidine					
	Elkosin					
THIAMBUTOSINE	N-(4-Butoxyphenyl)-N'-(4-dimethylaminophenyl)-					
	thiourea Ciba 1906					
Thioridazzne	10-[2-(1-Methyl-2-piperidyl)ethyl]-2-methyl-					
	thiophenothiazine					
TRIFLUOPERAZINE	Melleril is the hydrochloride					
IMPLOOPERZINE	10-[3-(4-Methylpiperazin-1-yl)propyl]-2-trifluoro- methylphenothiazine					
_	Stelazine is the dihydrochloride					
Trimetaphan	4,6-Dibenzyl-5-oxo-1-thia-4,6-diazatricyclo-					
	[6,3,0,0 <sup>2,7</sup> ]undecanium Arfonad is the (+)-camphorsulphonate					
Vancomycin	An antibiotic produced by Streptomyces orientalis					
37	Vancocin is the hydrochloride					
Viomycin	An antibiotic produced by certain strains of Strepto- myces griseus var. purpureus					
	Viocin is the sulphate; Vionactane is the pantothenate-					
•••	sulphate					
Warfarin	4-Hydroxy-3-(3-oxo-1-phenylbutyl)coumarin					
	3-(2-Acetyl-1-phenylethyl)-4-hydroxycoumarin Coumadin; Marevan is the sodium derivative					
	overment, materali is the souldin delivative					

#### INDEX TO APPROVED NAMES

(See the above list for the full Approved Name and the chemical name)

PROPRIETARY NAME, ETC.	Approved Name Reference	PROPRIETARY NAME, ETC.	APPROVED NAME REFERENCE
Alflorone	Fludrocortisone	Gantrisin	Sulphafurazole
Ancolan	Meclozine	Grisovin	Griscofulvin
Apresoline	Hydrallazine	Hexachlorophene	Hexachlorophane
Aprinox •	Bendrofluzzide	Hydralazine	Hydrallazine
Arfonad	Trimetaphan	Hydrenox	Hydroflumethiazide
Avomine	Promethazine Theoclate	Hydril	Hydrochlorothisxide
Biligrafin	Iodipamide	Hydrodiuril	Hydrochlorothiazide
Bradosol Butazolidin	Domiphen Bromide	Hydrosaluric	Hydrochlorothiazide
Calcium Disodium	Phenyibutazone	Hydrovit	Hydroxocobalamin
Versenate	Sodium Calciumedetate	Hypaque Ilosone	Sodium Diatrizoete
Ceepryn	Cetylpyridinium Chloride	Inversine	Erythromycin Estolate
Celbenin	Methicillin	Ismelin	Mecamylamine Guanethidine
Centyl	Bendrofluszide	Kynex	Suiphamethoxypyridesine
Chlorprophen-	2701AL CHANDIGO	Lederkyn	Sulphamethoxypyridaxing
pyridamine	Chlorpheniramine	Ledermycin	Demethylchlortetracycline
Chlor-Trimeton	Chlorpheniramine	Leukeran	Chlorambucil
Ciba 1906	Thiambutosine	Levorphan	Leverphanel
Cogentin	Benztropine	Lorfan	Levallorphan
Compazine	Prochlorperazine	Marevan	Warfarin
Coomassie Blue	Sodium Anoxynaphthonate	Marzine	Cyclizine
Coscopin	Noscapine	Medrol	Methylprednisolone
Coumadin	Warfarin	Medrone	Methylprednisolone
Daranide	Dichlorphenamide	Mel B	Melarsoprol
Decadron	Dexamethasone	Melleril	Thioridazine
Deca-Durabolin	Nandrolone	Mepavion	Meprobamate
Declomycin	Demethylchlortetracycline	Mephine	Mephentermine
Dequadin	Dequalinium Chloride	Metastab	Methylprednisolone
Deronil	Dexamethasone	Metycaine	Piperocaine
DexaCortisyl Dextelan	Dexamethasone	Mevasine	Mecamylamine
Diabinese	Dexamethasone	Midicel	Sulphamethoxypyridazine
Di-Ademil	Chlorpropamide	Millicorten Miltown	Dexamethasone
Diaginol	Hydroflumethiazide Sodium Acetrizoate		Meprobamate
Dianabol	Methandienone	Mycardol Mycil	Pentaerythritol Tetranitrate
Dibenyline	Phenoxybenzamine	Mycostatin	Chlorphenesin
Dibenzyline	Phenoxybenzamine	Myodil	Nystatin Iophendylate
Dichlotride	Hydrochlorothiazide	NPH Insulin	Isophane Insulin
Diparcol	Diethazine	Naclex	Hydroflumethiazide
Direma	Hydrochlorothiazide	Narcotine	Noscapine
Doriden	Glutethimide	Nardil	Phenelzine
Dramamine	Dimenhydrinate	Neo-Cytamen	Hydroxocobalemin
Dromoran	Levorphanol	Neo-Naclex	Bendrofluszide
Durabolin	Nandrolone	Nicolane	Noscapine
Elkosin	Sulphasomidine	Nilevar	Norethandrolone
Endografin	Iodipamide	Neludar	Methyprylone
Entamide	Diloxanide	Norlutin-A	Norethisterone
Entobex	Phanquone	Oradexon	Dexamethesone
Equanil	Meprobamate	P.R.Q. Antiseptic	Benzalkonium Chloride
Esidrex	Hydrochlorothiazide	Parpanit	Caramiphen
Ethiodan	Iophendylate	Peganone	Ethotoin
Ethnine Etisul	Pholcodine	Peritrate	Pentaerythritol Tetranitrate
Eurax	Ditophal	Perolysen	Pen.pidine
Eurax Fentazin	Crotamiton	Pipadone	Dipipanone
Florinef	Perphenazine Fludrocortisone	Piriton	Chlorpheniramine
Fludrocortone	Fludrocortisone Fludrocortisone	Primolut N	Norethisterone
Fulcin	Griscofulvin	Roccal	Benzalkonium Chloride
Furadantin	Nitrofurantoin	Rogitine	Phentolamine
Furamide	Dikoxanide	Romilar Rontyl	Dextromethorphan
		AUILYI	Hydrofiumethiazide

(6)

PROPRIETARY NAME, ETC. Secrosteron Seromycin Sparine Staphcillin Stelazine Stemetil Surfathesin Taoryl

Tensilon

APPROVED NAME
REFERENCE
Dimethisterone
Cycloserine
Promazine
Methicillin
Triffuoperazine
Prochlorperazine
Cyclonethycaine
Caramiphen
Pempidine
Edrophonium Chloride

NAME, ETC.
Tofranil
Trilafon
Ultandren
Urolucosil
Valoid
Vancocin
Viocin
Vionactane
Zephiran

PROPRIETARY

APPROVED NAME
REFERENCE
Imipramine
Perphenazine
Fluoxymesterone
Sulphamethizole
Cyclizine
Vancomycin
Viomycin
Viomycin
Benzalkonium Chloride

#### BOOKLET OF APPROVED NAMES

A booklet is available giving the Approved Names issued since 1948 together with Approved Names issued earlier for substances which have not become the subject of Pharmacopæial monographs. The booklet contains more than 700 Approved Names and also has an index of about 800 proprietary and other names of the substances and preparations.

Copies of the booklet may be obtained on application to the following address, to which other enquiries relating to Approved Names should be sent.

The Secretary,
British Pharmacopæia Commission,
General Medical Council Office,
44 Hallam Street,
London W1

Price: single copies, 4s. 0d.
10 copies, £1 16s. 0d.
25 copies, £4 0s. 0d.
100 copies, £13 10s. 0d.

Post free. Remittance with order payable to the General Medical Council.

# GENERAL MEDICAL COUNCIL

November, 1962

#### President of the General Council

THE RIGHT HONOURABLE LORD COHEN OF BIRKENHEAD, M.D.

#### Members of the General Council

THE RIGHT HONOURABLE LORD COHEN OF BIRKENHEAD, M.D. RITTH LOUISA COHEN, M.A. SIR GEORGE EDWARD GODBER, K.C.B., Nominated by Her Majesty, with the advice of D.M. CLAUDE WILLIAM GUILLEBAUD, C.B.E., Her Privy Council, or on the M.A. recommendation of the Gover-JOHN DENIS NELSON HILL, F.R.C.P. nor of Northern Ireland. THE RIGHT HONOURABLE SIR WILLIAM JOHN ANSTRUTHER-GRAY, Bt., M.C., M.P. SIR KENNETH COWAN, M.D. FRANK FIDDES MAIN, F.R.C.P. Edin. University of Birmingham. SIR ARTHUR PEREGRINE THOMSON, M.C., M.D. University of Bristol. ROBERT JAMES BROCKLEHURST, D.M. ARTHUR LESLIE BANKS, M.D. University of Cambridge. University of Durham. Andrew Gilchrist Ross Lowdon, Chosen by the O.B.E., F.R.C.S. University of Leeds. ARTHUR BERNARD PAIN, Ch.M. University of Liverpool. JOHN MORTIMER LEGGATE, F.R.C.S. University of London. EDWARD ROWAN BOLAND, C.B.E., M.D. University of Manchester. WALTER SCHLAPP, M.B. University of Oxford. C.B.E.. THOMAS POMFRET KILNER, F.R.C.S. University of Sheffield. IOHN GIBB McCRIE, O.B.E., F.R.C.P. Edin. University of Wales. ALAN TREVOR JONES, M.D. University of Aberdeen. Robert Douglas Lockhart, Ch.M. University of Edinburgh. JOHN HOWIE FLINT BROTHERSTON, M.D. University of Glasgow. CHARLES MANN FLEMING, M.D. University of St. Andrews. ROBERT BROCKIE HUNTER, F.R.C.P. Edin.

M.B.E.,

ix

JOHN HENRY BIGGART, C.B.E., M.D.

THOMAS MURPHY, M.B.

WILLIAM JOHN EDMUND JESSOP, M.D.

Queen's University of Belfast.

National University of Ireland.

University of Dublin.

by the

MACDONALD CRITCHLEY, C.B.E., M.D.

RICHARD DESMOND CURRAN, C.B.E., F.R.C.P.

HEDLEY JOHN BARNARD ATKINS, M.Ch.

VICTOR JOHN FREDERICK LACK, F.R.C.S., F.R.C.O.G.

JAMES GILBERT MURDOCH HAMILTON, F.R.C.P. Edin.

KEITH PATERSON BROWN, F.R.C.S. Edin.

DANIEL FOWLER CAPPELL, C.B.E., M.D.

JOHN FARNEWORTH SHEPPARD, M.B., L.A.H.

EDWARD THOMAS FREEMAN, M.D.

RICHARD ATKINSON STONEY, F.R.C.S. Irel.

Society of Apothecaries of London.

Royal College of Physicians of London.

Royal College of Surgeons of England.

Royal College of Obstetricians and Gynæcologists.

Royal College of Physicians of Edinburgh.

Royal College of Surgeons of Edinburgh.

Royal College of Physicians and Surgeons of Glasgow.

Apothecaries' Hall of Dublin.

Royal College of Physicians of Ireland.

Royal College of Surgeons in Ireland.

GEOFFREY OSBORN BARBER, O.B.E., M.B.
LAWRENCE DOUGAL CALLANDER, M.D.
WILFRED VIVIAN HOWELLS, O.B.E., M.B.
KATHARINE GEORGINA LLOYD-WILLIAMS,
C.B.E., M.D.
ALFRED TALBOT ROCERS, M.R.C.S.
STEUART NOY SCOTT, M.R.C.S.
SOLOMON WAND, M.B.
WELDON PATRICK TYRONE WATTS, M.S.
EDWARD ROBERT CHARLES WALKER, M.D.
GEORGE WALKER IRELAND, O.B.E., M.B.
THOMAS COLUMBA JAMES O'CONNELL,
M.Ch.

Elected by

The registered medical practitioners resident in England and Wales, Scotland, and Ireland.

Treasurers of the General Council
EDWARD ROWAN BOLAND, C.B.E., M.D.
ROBERT JAMES BROCKLEHURST, D.M.

Registrar of the General Council, and of the Branch Council for England and Wales

WALTER KINNEAR PYKE-LEES, M.A.

Registrars of the Branch Councils
FOR SCOTLAND—ALEXANDER BAXTER BROWN, M.C.
FOR IRELAND—GERTRUDE MCMEEKIN

#### NOTICE

By Section 47(4) of the Medical Act, 1956, the exclusive right of publishing, printing, and selling the British Pharmacopæia, and any documents containing amendments thereof, is vested in the General Medical Council.

The British Pharmacopæia 1963 supersedes all previous editions of the British Pharmacopæia.

#### NOTICE CONCERNING PATENTS

In this Pharmacopæia certain drugs and preparations have been included notwithstanding the existence of actual or potential patent rights. In so far as such substances are protected by Letters Patent, their inclusion in this Pharmacopæia neither conveys, nor implies, licence to manufacture.

#### PRECAUTIONARY LEGAL NOTICE

Substances described in monographs of the British Pharmacopæia may be subject to legal control in the United Kingdom or in parts of the British Commonwealth in which the British Pharmacopæia may have statutory force. Legal control may be concerned with the preparation and labelling of, and the standards for, substances described in the Pharmacopæia.

A statement with the heading 'Caution' is affixed to those monographs on substances which are subject (January, 1963) in the United Kingdom to the provisions of the Therapeutic Substances Act, 1956, and the Regulations made thereunder.

It must not be assumed that where no caution appears the subject of the monograph is free from legal restriction.

#### **PREFACE**

The statutory provisions which lay upon the General Medical Council the duty of publishing the British Pharmacopæia, and which regulate its publication, are contained in section 47 of the Medical Act, 1956. This section is as follows:

'47.—(1) The General Council shall, at such intervals as they may determine, cause to be published under their direction new editions of the British Pharmacopæia, containing such descriptions of and standards for, and such notes and other matter relating to, medicines, preparations, materials and articles used in the practice of medicine, surgery, or midwifery, as the Council may direct.

(2) The General Council may, if they think fit, cause to be published, between any two editions of the British Pharmacopæia, amendments

of the current edition.

(3) In connection with the publication of any new edition of the British Pharmacopæia, or of any amendment of the current edition, the General Council shall fix a date as from which the new edition, or the amendment, as the case may be, is to have effect, and shall cause to be inserted in every copy of the new edition, or of the document containing the amendment, as the case may be, a statement of the date so fixed.

(4) The General Council shall have the exclusive right of publishing, printing and selling the British Pharmacopæia and any documents containing amendments thereof, subject however to any determination by the Treasury of the price at which copies are to be sold to the public.

- (5) A copy of the British Pharmacopæia, or of any such document as aforesaid, being a copy purporting to be printed by such person as may be named in a notice published in the London, Edinburgh and Belfast Gazettes as authorised by the General Council to print the Pharmacopæia, or that document, as the case may be, shall be received in evidence as being the Pharmacopæia, or that document, as the case may be, and shall be evidence that the date stated therein for the coming into effect thereof is the date fixed in that behalf by the General Council.
- (6) References in sections eleven and twelve of the Pharmacy and Medicines Act, 1941, to the edition of the British Pharmacopæia last published before a given date shall be construed as references to the latest edition which has taken effect in accordance with this section before the said date, as affected by any amendments which have so taken effect.
- (7) In this section references to amendments of the British Pharmacopæia shall be construed as including references to additions thereto and to deletions therefrom.'

Statutory responsibility for the Pharmacopæia has rested upon the Council since the Medical Act of 1858. The present administrative

xiii

arrangements under which it is prepared date from 1928 and are based on recommendations made by a Sub-Committee of the Committee of Civil Research, usually known as the Macmillan Committee. In accordance with these recommendations, the detailed work of preparing new editions of the Pharmacopæia has been entrusted by the Council to a Pharmacopæia Commission. This Commission is appointed by the Council on the recommendations of a Selection Committee, which consists of representatives of the Council, of the Medical Research Council, and of the Pharmaceutical Societies of Great Britain, of Northern Ireland, and of Ireland.

The Commission itself is reconstituted periodically and the term of office of each Commission normally corresponds to the period during which a new edition of the British Pharmacopæia is prepared and published. Since 1948 new editions have been published at intervals of five years—in 1948, 1953, 1958, and 1963. In addition one Addendum has been published halfway between each main edition, the last such Addendum being that of 1960.

The Commission which prepared the Pharmacopæia of 1958 demitted office at the end of August, 1958, and the Commission was then reconstituted with effect from September 1, 1958. The British Pharmacopæia Commission 1958–1963; by whom the British Pharmacopæia 1963 has been prepared, consists of eleven members, whose names are printed on page xv. Eight of these eleven members had served on the previous Commission. Two of them had also served on the Commission of 1948–1953, while Professor Linnell has the distinction of having held office since 1936.

The British Pharmacopæia 1963 is the tenth edition of the British Pharmacopæia. While in general scope it resembles its immediate predecessors, this edition is considerably larger, and contains monographs relating to a greater number of 'medicines, preparations, materials and articles used in the practice of medicine, surgery, or midwifery' than have appeared in any previous edition. A full list of new monographs is given in the Introduction. This also contains a list of those monographs which appeared in the British Pharmacopæia 1958, as amended by the Addendum 1960, but have not been retained in this edition.

The General Medical Council have now caused this new edition to be published and on the advice of the Commission they have also fixed the date from which it is to take effect. The date is stated on the title page and as from that date the British Pharmacopæia 1963 will supersede all previous editions.

The increased size of this edition is one factor, though not the only one, which has rendered the task of the Commission, and of the Committees by whom the Commission has been assisted, more laborious and exacting than the burden which rested upon their

predecessors. The Council, and more particularly their Pharma-copæia Committee, are deeply sensible of the debt which they, and indeed all those who have occasion to consult the Pharmacopæia, owe to the members of the Commission and of its Committees for the manner in which the task has been discharged. The high prestige in which the British Pharmacopæia is held in many countries of the world is an eloquent testimony to the standard of their work. The Council accordingly desire once again to record their warmest appreciation of the services which have been rendered by the members and staff of the Commission, by the members of its numerous Committees, and by all the other persons who have assisted in the preparation of this volume.

The detailed work involved in the preparation of this book does not however reflect the full extent of the work of the Commission which took office in 1958. During the following years it has become increasingly necessary for both the Commission and the Council to give careful thought to the future of the British Pharmacopæia in the changing conditions of modern medical and pharmaceutical practice. In particular, the Commission and the Council have considered whether it would be desirable or practicable to provide standards for drugs newly introduced into medical practice on a wider scale or at an earlier date than has been possible under existing procedures. Evidence in regard to these and other questions related to the British Pharmacopæia was given in 1960 by the Commission and by the Council to an Interdepartmental Working Party on Legislation concerning Medicines. Since that time the question of the future development of the work of the British Pharmacopæia in relation to such matters has continued to receive active consideration, and it is intended in future to add monographs to the British Pharmacopæia by the publication of Addenda to the main edition at more frequent intervals than previously. In addition, the Council and the Commission will continue to consider what other steps may be necessarv or desirable in present circumstances to secure that the duties which have been entrusted to the Council by Parliament in the Medical Act may best be discharged in the public interest.

General Medical Council Office, 44 Hallam Street, London, W.1. November, 1962.

# BRITISH PHARMACOPŒIA COMMISSION

## 1958-1963

- Chairman: E. J. WAYNE, M.Sc., Ph.D., M.D., Regius Professor of Practice of Medicine in the University of Glasgow.
- K. Bullock, M.Sc., Ph.D., F.P.S., Professor of Pharmacy in the University of Manchester.
- D. G. Evans, Ph.D., D.Sc., F.R.S., Professor of Bacteriology and Immunology in the London School of Hygiene and Tropical Medicine.
- J. C. HANBURY, M.A., B.Pharm., F.P.S.
- F. HARTLEY, B.Sc., Ph.D., F.P.S.. Dean of the School of Pharmacy, University of London.
- D. V. Hubble, M.D., Professor of Paediatrics and Child Health in the University of Birmingham.
- D. W. HUDSON, M.P.S.
- W. H. LINNELL, Ph.D., D.Sc., F.P.S., Professor Emeritus of Pharmaceutical Chemistry in the University of London.
- W. L. M. PERRY, O.B.E., M.D., D.Sc., Professor of Materia Medica in the University of Edinburgh.
- E. F. Scowen, M.D., D.Sc., Professor of Medicine in the University of London and Director of the Medical Professorial Unit, St. Bartholomew's Hospital, London
- J. WALKER, Ph.D., D.Phil., D.Sc., Head of the Division of Organic Chemistry, National Institute for Medical Research, London.

Secretary: T. C. DENSTON, B.Pharm., F.P.S.

Assistant Secretary: G. R. KITTERINGHAM, B.Sc., F.P.S.

Scientific Assistants: S. Fowler, F.P.S.

I. LADDEN, B.Pharm.

#### INTRODUCTION

The British Pharmacopæia, in accordance with the decision of the General Medical Council, is published at intervals of five years. The work of preparing new editions under the general direction of the Council is entrusted to the British Pharmacopæia Commission, whose members are appointed for a similar term of office. On September 1, 1958, a new Commission assumed office with the responsibility of preparing an Addendum to the British Pharmacopæia 1958 and a complete new edition of the Pharmacopæia for publication in 1963. The Addendum was published on October 3, 1960 and had effect from March 1, 1961. It served to bring the Pharmacopæia more fully up to date by providing forty-nine monographs on drugs and preparations not described in the existing volume and by a number of important amendments to the monographs and appendices.

The Commission appointed the following Committees to assist in the preparation of the Addendum 1960 and the British Pharmacopæia 1963. Grateful acknowledgement is made of the arduous work of the members, including the Canadian corresponding members, in the revision of monographs retained from the previous edition and in

the preparation of new monographs:

1. MEDICINE AND DOSES COMMITTEE. E. J. Wayne (Chairman), J. Bishop Harman, D. V. Hubble, C. A. Keele, W. L. M. Perry, R. Bodley Scott, E. F. Scowen, K. J. R. Wightman.

Consultative Panel. Lord Cohen of Birkenhead, V. W. Dix, Sir Derrick Dunlop, John Gillies, L. G. Goodwin, Raymond Greene, Clifford Hoyle, John Hunt, C. F. W. Illingworth, T. N. A. Jeffcoate, Alexander Kennedy, Peter Kerley, Reginald Lightwood, R. M. B. MacKenna, E. S. Perkins, William Sargant, Andrew Wilson.

- 2. NOMENCLATURE COMMITTEE. E. F. Scowen (Chairman), F. W. Adams, G. Bryan, R. S. Cahn, H. Davis, B. A. Ellis, F. Hartley, R. F. Haslam, W. H. Linnell, R. Bodley Scott, B. J. Thomas, W. T. Thorne, E. H. Tinley.
- 3. IMMUNOLOGICAL PRODUCTS COMMITTEE. D. G. Evans (Chairman), R. Goulding, L. Greenberg, J. H. Humphrey, D. A. Long, C. L. Oakley, H. J. Parish, F. T. Perkins, D. Riding, A. F. B. Standfast, J. Ungar, B. G. F. Weitz.
- 4. BLOOD PRODUCTS COMMITTEE. D. G. Evans (Chairman), D. R. Bangham, J. Gibbard, R. Goulding, R. A. Kekwick, W. d'A. Maycock, A. E. Mourant, F. Stratton, L. Vallet.
- 5. BIOLOGICAL ASSAYS COMMITTEE. W. L. M. Perry (Chairman), P. Armitage, D. R. Bangham, G. A. H. Buttle, D. G. Evans, J. H. Gaddum, xvi