



WORLD HEALTH ORGANIZATION
INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Volume 13

Some Miscellaneous Pharmaceutical Substances

Summary of Data Reported and Evaluation

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Last updated: 25 March 1998

ACRIFLAVINIUM CHLORIDE

VOL.: 13 (1977) (p. 31)

CAS No.: 8018-07-3

Chem. Abstr.Name: 3,6-Diamino-10-methylacridinium chloride mixture with 3,6-acridinediamine

5. Summary of Data Reported and Evaluation

5.1 Animal data

No evaluation concerning the carcinogenicity of acriflavinium chloride can be made from the only limited study in rats given the compound by subcutaneous injection. Further testing of this compound would appear to be desirable, also in view of the results obtained in mutagenicity studies.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 56: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- Acriflavon
- Acriflavine mixture with proflavine
- Acriflavinii chloridum
- Angiflan
- Assiflavine
- Avlon
- Bialflavina
- Bioacridin
- Bovoflavin
- Burnol
- Buroflavin
- Choliflavin
- Chromoflavine
- Diacid
- 3,6-Diaminoacridine mixture with 3,6-diamino-10-methylacridinium chloride
- 2,8-Diamino-10-methylacridinium chloride mixture with 2,8-diaminoacridine
- Euflavin
- Euflavine
- Flavacridinum hydrochloricum
- Flaviform
- Flavine
- Flavinetten
- Flavipin
- Flavisept
- Glyco-Flavine
- Gonacin
- Gonacrine
- Isravin
- Mediflavin

- Neutral acriflavine
- Neutroflavin
- Neutroflavine
- Panflavin
- Pantonsiletten
- Tolivalin
- Trachosept
- Tripla-Etilo
- Trypaflavin
- Trypaflavine
- Trypaflavine neutral
- Trypaflavinum
- Xanthacridinum
- Vetaflavin
- Zoriflavin

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AUROTHIOGLUCOSE

VOL.: 13 (1977) (p. 39)

CAS No.: 12192-57-3

Chem. Abstr. Name: (1-Thio-D-glucofuranosato)gold

5. Summary of Data Reported and Evaluation

5.1 Animal data

Aurothioglucose is carcinogenic in mice after its administration by single intraperitoneal injection: it produced an increased incidence of hepatomas in male mice.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 57: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- Aureotan
- Auromyose
- 1-Aurothio-D-glucofuranose
- Aurumine
- Authron
- Brenol
- (D-Glucofuranosylthio) gold
- (1-D-Glucofuranosylthio)gold
- Glysanol B
- Gold thioglucose
- Oronol
- Romosol
- Solganal
- Solganal B
- Solganol B
- (1-Thio-D-glucofuranosato) gold
- 1-Thio-D-glucofuranose, gold complex
- 1-Thio-glucofuranose, monogold(I⁺)salt
- 1-Thio-D-glucofuranose, monogold(I⁺)salt

CHLOROQUINE

VOL.: 13 (1977) (p. 47)

CAS No.: 54-05-7

Chem. Abstr. Name: *N*⁴-(7-Chloro-4-quinolinyl)-*N*¹, *N*¹-diethyl-1,4-pentanediamine

5. Summary of Data Reported and Evaluation

5.1 Animal data

The negative results obtained in the only available study in rats given chloroquine by oral administration did not form an adequate basis on which to make an evaluation of the carcinogenicity of this compound.

N.B. - The Working Group was aware of an on-going carcinogenicity study in mice (IARC, 1976).

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 60: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- Amokin
- Aralen
- Arechin
- Arthrochin
- Artrichin
- Avlochlor
- Avloclor
- Bemaco
- Bemaphate
- Bemasulph
- Benaquin
- Bipiquin
- Chemochin
- Chingamin
- Chlorochin
- 7-Chloro-4-(4-diethylamino-1-methylbutylamino)quinoline
- 7-Chloro-4-{[4-(diethylamino)-1-methylbutyl]amino}quinoline
- Chlorquin
- Cidanchin
- Clorochina
- Chloroquina
- Chloroquinium
- Cocartrit
- Delagil
- Dichinalex
- Elestol
- Gontochin

- Heliopar
- Imagon
- Iroquine
- Klorokin
- Lapaquin
- Malaquin
- Malaren
- Malarex
- Mesylith
- Neochin
- Nivachine
- Nivaquine B
- Quinachlor
- Quinercyl
- Quingamin
- Quingamine
- Quinilon
- Quinoscan
- Resochen
- Resochin
- Resoquina
- Resoquine
- Reumachlor
- Reumaquin
- Roquine
- RP 3377
- Sanoquin
- Silbesan
- Siragan
- SN 6718
- SN 7618
- Solprina
- Sopaquin
- Tanakan
- Tresochin
- Trochin
- W 7618
- Win 244

DITHRANOL

VOL.: 13 (1977) (p. 75)

CAS No.: 1148-38-0

Chem. Abstr. Name: 1,8,9-Anthracenetriol

5. Summary of Data Reported and Evaluation

5.1 Animal data

Dithranol is a tumour-promoting agent in mouse skin carcinogenesis experiments following initiation with either 7,12-dimethylbenz[*a*]anthracene or urethane. An increased incidence of lymphomas was also observed in mice painted with dithranol after urethane initiation.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 63: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- Anthra-Derm
- Anthralin
- 1,8,9-Anthratriol
- Batidrol
- Chrysodermol
- Cignolin
- Cigthranol
- Cygnolin
- Dermaline
- Derobin
- 1,8-Dihydroxyanthranol
- 1,8-Dihydroxy-9-anthranol
- Dioxyanthranol
- Lasan
- Psoriacid-Stift
- 1,8,9-Trihydroxyanthracene

ETHIONAMIDE

VOL.: 13 (1977) (p. 83)

CAS No.: 536-33-4

Chem. Abstr. Name: 2-Ethyl-4-pyridinecarbothioamide

5. Summary of Data Reported and Evaluation

5.1 Animal data

Ethionamide is carcinogenic in mice after its oral administration, the only species and route of administration tested: it produced thyroid carcinomas.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 63: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- Aetina
- Aetiva
- Amidazin
- Amidazine
- Bayer 5312
- EIP
- ETH
- Ethimide
- Ethina
- Ethinamide
- Ethioniamide
- Etimid
- Etiocidan
- Etionid
- Etionizina
- Etionizine
- α -Ethylisonicotinic acid thioamide
- 2-Ethylisonicotinic acid thioamide
- 2-Ethylisonicotinic thioamide
- α -Ethylisonicotinoylthioamide
- Ethylisothiamide
- α -Ethylisothionicotinamide
- 2-Ethylisothionicotinamide
- 2-Ethyl-4-thioamidylpyridine
- 2-Ethyl-4-thiocarbamoylpyridine
- α -Ethylthioisonicotinamide
- 2-Ethylthioisonicotinamide
- Ethynomide
- Fatoliamid
- F.I. 58-30

- Iridocin
- Iridozin
- Isothin
- Isotiamida
- Itiocide
- Nicotion
- Nisotin
- Nizotin
- Rigenicid
- Sertinon
- Teberus
- 1314 TH
- TH 1314
- Th 1314
- Thianid
- Thianide
- Thioamide
- Thiomid
- Thioniden
- Tio-Mid
- Trecator
- Trescatyl
- Trescazide
- Tubermin
- Tuberoïd
- Tuberoson

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HYCANTHONE and HYCANTHONE MESYLATE

VOL.: 13 (1977) (p. 91)

Hycanthone

CAS No.: 3105-97-3

Chem. Abstr. Name: 1-[[2-(Diethylamino)ethyl]amino]-4-(hydroxymethyl)-9*H*-thioxanthen-9-one

Hycanthone mesylate

CAS No.: 23255-93-8

Chem. Abstr. Name: 1-[[2-(Diethylamino)ethyl]amino]-4-(hydroxymethyl)-9*H*-thioxanthen-9-one, monomethanesulfonate (salt)

5. Summary of Data Reported and Evaluation

5.1 Animal data

Hycanthone mesylate is carcinogenic in mice previously infected with *Schistosoma mansoni*: a significant increase in the incidence of hepatocellular carcinomas was observed in these mice following repeated intramuscular injections of this compound. The limited data available are not sufficient to evaluate whether hycanthone mesylate is carcinogenic in non-infected animals.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation of Hycanthone mesylate: Suppl. 7 (1987) (p. 64: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms for Hycanthone

- 1-[[2-(Diethylamino)ethyl]amino]-4-(hydroxymethyl)thioxanthen-9-one
- Lucanthone metabolite
- Win 24933

Synonyms for Hycanthone mesylate

- l-[[2-(Diethylamino)ethyl]amino]-4-(hydroxymethyl)thioxanthen-9-one, monomethanesulfonate (salt)
- Etrenol
- Hycanthone methanesulfonate
- Hycanthone monomethanesulfonate

8-HYDROXYQUINOLINE

VOL.: 13 (1977) (p. 101)

CAS No.: 148-24-3

Chem. Abstr. Name: 8-Quinolinol

5. Summary of Data Reported and Evaluation

5.1 Animal data

8-Hydroxyquinoline has been tested in mice and rats by oral, subcutaneous and intravaginal administration and in mice by skin application and bladder implantation. Most of these experiments were of limited value, for the reasons mentioned in the text. Within these limitations, the studies in mice and rats by oral administration and subcutaneous injection or in mice by skin application gave positive or negative results of borderline significance.

Positive results were obtained in bladder implantation experiments when 8-hydroxyquinoline was incorporated in cholesterol pellets but were negative when paraffin wax pellets were employed (see also introduction, in this volume). Its application intravaginally in different vehicles to mice and rats did not significantly increase the incidence of tumours when compared with that in appropriate controls.

No evaluation of the carcinogenicity of 8-hydroxyquinoline can be made on the basis of the available data (however, see also the results obtained in mutagenicity studies).

N.B. - Data on the copper chelate of 8-hydroxyquinoline were discussed, but because its chemical properties and uses are different from those of 8-hydroxyquinoline it will be considered by a further Working Group.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 64: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- Bioquin
- Hydroxybenzopyridine
- 8-Hydroxy quinoline
- 8-OQ
- Oxin
- Oxine
- Oxybenzopyridine
- Oxychinolin
- 8-Oxyquinoline
- Phenopyridine
- 8-Quinol
- Quinophenol
- Tumex

Last updated: 25 March 1998

METRONIDAZOLE

VOL.: 13 (1977) (p. 113)

5. Summary of Data Reported and Evaluation

5.1 Animal data

Metronidazole is carcinogenic in mice after its oral administration: it significantly increased the incidence of lung tumours in both sexes and the incidence of lymphomas in females. Its oral administration to rats increased the incidence and multiplicity of mammary fibroadenomas.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: [Suppl. 7 \(1987\)](#)

Last updated: 25 March 1998

NIRIDAZOLE

VOL.: 13 (1977) (p. 123)

CAS No.: 61-57-4

Chem. Abstr. Name: 1-(5-Nitro-2-thiazolyl)-2-imidazolidinone

5. Summary of Data Reported and Evaluation

5.1 Animal data

Niridazole is carcinogenic in mice and hamsters after its oral administration: in mice it induced lymphomas and tumours of the lung, stomach, mammary gland, ovary and bladder; in hamsters it produced tumours of the forestomach and papillomas of the urinary bladder. Infection of treated mice and hamsters with *Schistosoma mansoni* cercariae did not affect the carcinogenicity of the compound.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 67: **Group 2B**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- Ambilhar
- 32644-Ba
- Ba 32644
- Ciba 32644-Ba
- Nitrothiamidazol
- Nitrothiamidazole
- Nitrothiazole
- 1-(5-Nitro-2-thiazolyl)-2-imidazolinone
- 1-(5-Nitro-2-thiazolyl)-2-oxotetrahydroimidazole
- NTOI

OXYMETHOLONE

VOL.: 13 (1977) (p. 131)

5. Summary of Data Reported and Evaluation

5.1 Animal data

No data were available to the Working Group.

5.2 Human data

Although ten cases of liver-cell tumours have been reported in patients with aplastic anaemia, Fanconi's anaemia or paroxysmal nocturnal haemoglobinuria treated for long periods with oxymetholone alone or in combination with other androgenic drugs, a causal relationship cannot be established.

The increased risk of developing liver-cell tumours could be related to hepatic damage known to be caused by oxymetholone. On the other hand, patients with congenital anaemias many have an intrinsically higher risk of developing tumours; this risk many become manifest during the extended survival resulting from administration of the drug.

Subsequent evaluation: [Suppl. 7 \(1987\) \(Androgenic \(Anabolic\) Steroids\)](#)

Last updated: 25 March 1998

PHENACETIN

VOL.: 13 (1977) (p. 141)

5. Summary of Data Reported and Evaluation

5.1 Animal data

In one limited study in which phenacetin was administered orally to rats, no carcinogenic effects were observed. One putative metabolite of phenacetin, *N*-hydroxyphenacetin, is carcinogenic in rats after its oral administration: it produced hepatocellular carcinomas.

N.B. - The Working Group was aware that several studies on the carcinogenicity of phenacetin are underway (IARC, 1976).

5.2 Human data

Available data indicate that heavy use of analgesic mixtures containing phenacetin is associated with papillary necrosis of the kidney and suggest a relationship between such use and the development of transitional-cell carcinoma of the renal pelvis.

Subsequent evaluations: [Vol. 24 \(1980\)](#); [Suppl. 7 \(1987\)](#)

Last updated: 25 March 1998

PHENOBARBITAL and PHENOBARBITAL SODIUM

VOL.: 13 (1977) (p. 157)

Phenobarbital:

CAS No.: 50-06-6

Chem. Abstr. Name: 5-Ethyl-5-phenyl-2,4,6-(1*H*,3*H*,5*H*)pyrimidinetrione

Phenobarbital sodium:

CAS No.: 57-30-7

Chem. Abstr. Name: 5-Ethyl-5-phenyl-2,4,6-(1*H*,3*H*,5*H*)pyrimidinetrione, monosodium salt

5. Summary of Data Reported and Evaluation

5.1 Animal data

Phenobarbital sodium is carcinogenic in mice and rats after its oral administration for lifetime. In mice, it produced benign and malignant liver-cell tumours; in rats, benign liver-cell tumours were observed very late in life.

5.2 Human data

A possible relationship between anticonvulsant therapy in which phenobarbital was known to be included and the occurrence of cancer in man has been investigated in one large epidemiological study and reported in several case studies. In most instances, phenobarbital was given in conjunction with other drugs, in particular phenytoin. The available evidence is insufficient to allow an evaluation of the carcinogenicity of phenobarbital to be made (see also monograph on phenytoin).

Subsequent evaluations: [Suppl. 7 \(1987\)](#); [Vol. 79 \(2001\)](#)

Synonyms for Phenobarbital

- Adonal
- Aephenal
- Agrypnal
- Amylofene
- Aphenylbarbit
- Aphenyletten
- Austrominal
- Barbapil
- Barbellen
- Barbellon
- Barbenyl
- Barbilettae
- Barbinal
- Barbiphen
- Barbiphenyl
- Barbipil
- Barbita
- Barbivis
- Barbonal
- Barbophen
- Bardorm
- Bartol

- Bialminal
- Blu-phen
- Cabronal
- Calmetten
- Calminal
- Cardenal
- Cemalonal
- Codibarbital
- Coronaletta
- Damoral
- Dezibarbitur
- Dormina
- Dormiral
- Doscalun
- Duneryl
- Ensobarb
- Ensodorm
- Epanal
- Epidorm
- Epilol
- Episedal
- Epsylone
- Eskabarb
- 5-Ethyl-5-phenylbarbituric acid
- Etilfen
- Euneryl
- Fenbital
- Fenemal
- Fenobarbital
- Fenosed
- Fenylettae
- Gardenal
- Gardepanyl
- Glysoletten
- Haplopan
- Haplos
- Helional
- Hennoletten
- Hypnaletten
- Hypnogen
- Hypnolone
- Hypno-Tablinetten
- Hypnotal
- Hysteps
- Lefebar
- Leonal
- Lephebar
- Lepinal
- Linasen
- Liquital
- Lixophen
- Lubergal
- Lubrokol
- Lumen
- Lumesettes
- Lumesyn
- Luminal
- Lumofridetten
- Luphenil

- Luramin
- Molinal
- Neurobarb
- Nirvonol
- Noptil
- Nova-Pheno
- Numol
- Nunol
- Parkotal
- PEBA
- Pharmetten
- Phenaemal
- Phen-Bar
- Phenemal
- Phenobal
- Phenobarbitone
- Phenobarbituric acid
- Phenylbarbital
- Phenobarbyl
- Phenoluric
- Phenonyl
- Phenoturic
- Phenyletten
- Phenylethylbarbiturate
- Phenylethylbarbituric acid
- 5-Phenyl-5-ethylbarbituric acid
- Phenylethylmalonylurea
- Phenyral
- Phob
- Polcominal
- Promptonal
- Sedabar
- Seda-Tablinen
- Sedicat
- Sedizorin
- Sedlyn
- Sedofen
- Sedonal
- Sedonettes
- Sevenal
- Sombutol
- Somnolens
- Somnoletten
- Somnosan
- Somonal
- Spasepilin
- Starifen
- Starilettae
- Stental Extentabs
- Teolaxin
- Thenobarbital
- Triarbarb
- Tridezibarbitur
- Triphenatol
- Versomnal
- Zadoletten
- Zadonal

Synonyms for Phenobarbital sodium

- 5-Ethyl-5-phenylbarbituric acid sodium
- 5-Ethyl-5-phenylbarbituric acid sodium salt
- Gardenal sodium
- Luminal sodium
- PBS
- Phenemalum
- Phenobal sodium
- Phenobarbital
- Phenobarbital elixir
- Phenobarbital-sodium
- Phenobarbitone sodium
- Phenobarbitone sodium salt
- Phenylethylbarbituric acid, sodium salt
- Sodium 5-ethyl-5-phenylbarbiturate
- Sodium luminal
- Sodium phenobarbital
- Sodium phenobarbitone
- Sodium phenylethylbarbiturate
- Soluble phenobarbital
- Soluble phenobarbitone

Last updated: 25 March 1998

PHENYLBUTAZONE and OXYPHENBUTAZONE

VOL.: 13 (1977) (p. 183)

Phenylbutazone

CAS No.: 50-33-0

Chem. Abstr. Name: 4-Butyl-1,2-diphenyl-3,5-pyrazolidinedione

Oxyphenbutazone

CAS No.: 129-20-4

Chem. Abstr. Name: 4-Butyl-1-(4-hydroxyphenyl)-2-phenyl-3, 5-pyrazolidinedione

5. Summary of Data Reported and Evaluation

5.1 Animal data

No data were available to the Working Group.

5.2 Human data

A number of cases of leukaemia were reported between 1960 and 1966 in subjects treated with phenylbutazone or oxyphenbutazone. The available evidence is, however, insufficient to substantiate the suggestion that use of phenylbutazone or oxyphenbutazone is related to subsequent development of leukaemia.

Subsequent evaluation of Phenylbutazone: [Suppl. 7 \(1987\)](#)

Subsequent evaluation of Oxyphenbutazone: [Suppl. 7 \(1987\)](#) (p. 69: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms for Phenylbutazone

- Alindor
- Alkabutazona
- Alqoverin
- Anerval
- Anpuzone
- Antadol
- Anuspiramin
- Arthrizin
- Artrizin
- Artrizone
- Artropan
- Azdid
- Azobutil
- Benzone
- Betazed
- Bizolin 200
- B.T.Z.
- Butacote
- Butacompre

- Butadion
- Butadiona
- Butadione
- Butagesic
- Butalgina
- Butalan
- Butalidon
- Butaluy
- Butaphen
- Buta-Phen
- Butapirazol
- Butapyrazole
- Butarecbon
- Butartril
- Butartrina
- Butazina
- Butazolidin
- Butazolidine
- Butazona
- Butazone
- Butidiona
- Butiwas-simple
- Butone
- Butoz
- 4-Butyl-1,2-diphenyl-3,5-dioxypyrazolidine
- 4-Butyl-1,2-diphenyl-pyrazolidine-3,5-dione
- 3,5-Dioxo-1,2-diphenyl-4-*n*-butylpyrazolidine
- Butylpyrin
- Buvetzone
- Buzon
- Chembutazone
- Digibutina
- Diossidone
- Diozol
- Diphebuzol
- Diphenylbutazone
- 1,2-Diphenyl-4-butyl-3,5-pyrazolidinedione
- 1,2-Diphenyl-3,5-dioxo-4-butylpyrazolidine
- 1,2-Diphenyl-2,3-dioxo-4-*n*-butylpyrazolidine
- Ecobutazone
- Elmedal
- Equi Bute
- Eributazone
- 'Esteve'
- Febuzina
- Fenartil
- Fenibutasan
- Fenibutazona
- Fenylbutazon
- Fenilbutazona
- Fenilbutina
- Fenilbutine
- Fenibutol
- Fenilidina
- Fenotone
- Flexazone
- G 13,871
- IA-But
- Intalbut

- Intrabutazone
- Ipsoflame
- Kadol
- Lingel
- Malgesic
- Mephabutazone
- Merizone
- Nadazone
- Nadozone
- Neo-Zoline
- Novophenyl
- Phebuzin
- Phebuzine
- Phen-Buta-Vet
- Phenbutazol
- Phenopyrine
- Phenylbetazone
- Phenylbutaz
- Phenylbutazonum
- Phenyl-Mobuzon
- Pirarreumol 'B'
- Praecirheumin
- Pyrabutol
- Pyrazolidin
- Rectofasa
- Reudo
- Reudox
- Reumasyl
- Reumazin
- Reumazol
- Reumune
- Reupolar
- Robizon-V
- Rubatone
- Scanbutazone
- Schemergin
- Shigrocin
- Tazone
- Tetnor
- Tevcodyne
- Therazone
- Ticinil
- Todalgil
- Uzone
- VAC-10
- Wescozone
- Zolaphen
- Zolidinum

Synonyms for Oxyphenbutazone

- Artroflog
- Butaflogin
- Butanova
- Butapirone
- Butilene
- 4-Butyl-2-(4-Hydroxyphenyl)-1-phenyl-3,5-dioxopyrazolidine
- 4-Butyl-1-(*para*-hydroxyphenyl)-2-phenyl-3,5-pyrazolidinedione

- 4-Butyl-2-(*para*-hydroxyphenyl)-1-phenyl-3,5-pyrazolidinedione
 - Crovaril
 - Deflogin
 - Etrozolidina
 - Flamaril
 - Flanaril
 - Flogal
 - Floghene
 - Flogistin
 - Flogitolo
 - Flogodin
 - Flogoril
 - Flogostop
 - Flopirina
 - Frabel
 - G 27202
 - Hydroxyphenylbutazone
 - *para*-Hydroxyphenylbutazone
 - 1-(*para*-Hydroxyphenyl)-2-phenyl-4-butyl-3,5-pyrazolidinedione
 - 1-*para*-Hydroxyphenyl-2-phenyl-3,5-dioxo-4-*n*-butylpyrazolidine
 - Idrobutazina
 - Infamil
 - Inflammil
 - Ipabutona
 - Iridil
 - Isobutazina
 - Isobutil
 - Metabolite I
 - Neo-Farmadol
 - Neofen
 - Offitril
 - Oxalid
 - Oxazolidin
 - Oxazolidin-Geigy
 - Oxibutol
 - Oxi-Fenibutol
 - Oxyphenbutazone
 - Oxyphenobutazone
 - Oxyphenylbutazone
 - *para*-Oxyphenylbutazone
 - 1-Phenyl-2-(*para*-hydroxyphenyl)-3,5-dioxo-4-butylpyrazolidine
 - 1-Phenyl-2-(*para*-hydroxyphenyl)-3,5-dioxo-4-*n*-butylpyrazolidine
 - Pirabutina
 - Piraflogin
 - Poliflogil
 - Remazin
 - Reumox
 - Rumapax
 - Tandacote
 - Tandalgesic
 - Tandearil
 - Tanderil
 - Tanderil
 - Telidal
 - Tendearil
 - Validil
 - Visubutina
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PRONETALOL HYDROCHLORIDE

VOL.: 13 (1977) (p. 227)

CAS No.: 51-02-5

Chem. Abstr. Name: α [(1-Methylethyl)amino]methyl-2-naphthalene-methanol, hydrochloride

5. Summary of Data Reported and Evaluation

5.1 Animal data

Pronetalol hydrochloride is carcinogenic in mice following its oral administration: it produced thymic lymphomas.

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 70: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms for Pronetalol

- Alderlin hydrochloride
- ICI 38174
- Inetol
- α -[(Isopropylamino)methyl]-2-naphthalenemethanol, hydrochloride
- 2-Isopropylamino-1-(2-naphthyl)ethanol hydrochloride
- Naphthylisoproterenol hydrochloride
- Nethalide hydrochloride
- Pronethalol hydrochloride

Last updated: 25 March 1998

PYRIMETHAMINE

VOL.: 13 (1977) (p. 233)

CAS No.: 58-14-0

Chem. Abstr. Name: 5-(4-Chlorophenyl)-6-ethyl-2,4-pyrimidinediamine

5. Summary of Data Reported and Evaluation

5.1 Animal data

In the only study available, pyrimethamine produced a significant increase in the number of lung tumours per mouse when it was given intraperitoneally at high doses. This limited evidence of carcinogenicity awaits confirmation.

N.B. - The Working Group was also aware of ongoing carcinogenicity tests in mice and rats (IARC, 1976).

5.2 Human data

No case reports or epidemiological studies were available to the Working Group.

Subsequent evaluation: Suppl. 7 (1987) (p. 71: **Group 3**)

For definition of Groups, see [Preamble Evaluation](#).

Synonyms

- BW 50-63
- Chloridin
- Chloridine
- 5-(4'-Chlorophenyl)-2,4-diamino-6-ethylpyrimidine
- Daraclor
- Darapram
- Daraprim
- Daraprime
- 2,4-Diamino-5-(4-chlorophenyl)-6-ethylpyrimidine
- 2,4-Diamino-5-(*para*-chlorophenyl)-6-ethylpyrimidine
- Diaminopyritamin
- Erbaprelina
- Erboprelina
- Fansidar
- Malocide
- Maloprim
- NSC 3061
- Pirimecidan
- Pyremethamine
- 4753 R.P.
- Tindurin