Protein binding is at least 98%. Lumiracoxib undergoes extensive hepatic metabolism; several enzymes appear to be involved including glucuronosyltransferase and cytochrome P450 isoenzymes. The main oxidative pathway is mediated by the CYP2C9 isoenzyme; however, this does not appear to be the major pathway. Three major metabolites have been identified: 4′-hydroxy-lumiracoxib, 5-carboxy-lumiracoxib, and 4′-hydroxy-5-carboxy-lumiracoxib. The 4′-hydroxy metabolite is active as a cyclo-oxygenase-2 (COX-2) inhibitor although it is less potent than lumiracoxib. The plasma half-life of lumiracoxib is about 4 hours. Slightly more of a dose is excreted in the urine (54%) than in the faeces (about 43%); only about 5% of a dose is excreted unchanged.

◊ References.

1. Scott G, *et al.* Pharmacokinetics of lumiracoxib in plasma and synovial fluid. *Clin Pharmacokinet* 2004; **43:** 467–78.

Uses and Administration

Lumiracoxib is an NSAID (p.99) reported to be a selective inhibitor of cyclo-oxygenase-2 (COX-2). It has been withdrawn in many countries after reports of hepatotoxicity. In the UK, lumiracoxib was used in the treatment of osteoarthritis of the knee and hip in an oral dose of 100 mg once daily. Higher doses of up to 400 mg daily have been used in some countries but may be associated with an increased risk of hepatotoxicity (see Effects on the Liver, above).

◊ References.

1. Lyseng-Williamson KA, Curran MP. Lumiracoxib. *Drugs* 2004; **64:** 2237–46.
2. Bannwarth B, Berenbaum F. Clinical pharmacology of lumiracoxib, a second-generation cyclooxygenase 2 selective inhibitor. *Expert Opin Invest Drugs* 2005; **14:** 521–33.
3. Rordorf CM, *et al.* Clinical pharmacology of lumiracoxib: a selective cyclo-oxygenase-2 inhibitor. *Clin Pharmacokinet* 2005; **44:** 1247–66.
4. Schnitzer TJ, *et al.* Lumiracoxib in the treatment of osteoarthritis, rheumatoid arthritis and acute postoperative dental pain: results of three dose-response studies. *Curr Med Res Opin* 2005; **21:** 151–61.
5. Berenbaum F, *et al.* Efficacy of lumiracoxib in osteoarthritis: a review of nine studies. *J Int Med Res* 2005; **33:** 21–41.
6. Sheldon E, *et al.* Efficacy and tolerability of lumiracoxib in the treatment of osteoarthritis of the knee: a 13-week, randomized, double-blind comparison with celecoxib and placebo. *Clin Ther* 2005; **27:** 64–77.
7. Fleischmann R, *et al.* Lumiracoxib is effective in the treatment of osteoarthritis of the knee: a prospective randomized 13-week study versus placebo and celecoxib. *Clin Rheumatol* 2006; **25:** 42–53.

Preparations

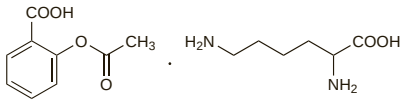
Proprietary Preparations (details are given in Part 3)
Arg.: Prexige; ***Austral.:*** Prexige†; ***Braz.:*** Prexige; ***Chile:*** Prexige; ***Hung.:*** Prexige; ***Indon.:*** Prexige; ***NZ:*** Prexige; ***Port.:*** Frexocel†; Hirzia†; ***UK:*** Prexige†.

Lysine Aspirin

Acetilsalicilato de lisina; Aspirin DL-Lysine; Lysiiniasetyylisalisylaatti; Lysinacetylsalicylat; Lysine Acetylsalicylate; DL-Lysine Acetylsalicylate; Lysinum Acetylsalicylicum.

Лизин-Аспирин

$C_{15}H_{22}N_2O_6$ = 326.3.
CAS — 62952-06-1.



Pharmacopoeias. In *Fr.*

Adverse Effects, Treatment, and Precautions

As for Aspirin, p.20. Anaphylactic shock has been reported in patients given lysine aspirin by injection.

Lysine aspirin, like aspirin, should not generally be given to children because of the risk of Reye's syndrome.

Hypersensitivity. For a suggestion that lysine aspirin might be more suitable than aspirin for the diagnosis of sensitivity to NSAIDs, see under Hypersensitivity on p.21.

Interactions

For interactions associated with aspirin, see p.23.

Uses and Administration

Lysine aspirin has analgesic, anti-inflammatory, and antipyretic actions similar to those of aspirin (see p.23). When given, lysine aspirin dissociates into lysine and aspirin; aspirin is then hydrolysed to salicylic acid. Lysine aspirin 900 mg is equivalent to about 500 mg of aspirin.

Lysine aspirin is used in the treatment of pain, fever, and rheumatic disorders. It is given in oral doses equivalent to 0.5 to 1 g of aspirin, repeated every 4 hours as needed up to a maximum of 3 g of aspirin daily (2 g daily in the elderly) for pain and fever. The dose for rheumatic disorders is equivalent to 3 to 6 g of aspirin daily in 3 or 4 divided doses. Lysine aspirin is also given intramuscularly or intravenously in similar doses; the maximum daily parenteral dose is equivalent to 4 g of aspirin for very severe pain and to 6 g of aspirin for rheumatic disorders.

Lysine aspirin is also used with metoclopramide in the treatment of migraine.

Lysine aspirin has also been used in the management of thromboembolic disorders.

Headache. Some references to the use of lysine aspirin, often with metoclopramide, in the treatment of migraine.

1. Tfelt-Hansen P, *et al.* The effectiveness of combined oral lysine acetylsalicylate and metoclopramide compared with oral sumatriptan for migraine. *Lancet* 1995; **346:** 923–6.
2. Diener HC. Efficacy and safety of intravenous acetylsalicylic acid lysinate compared to subcutaneous sumatriptan and parenteral placebo in the acute treatment of migraine. A double-blind, double-dummy, randomized, multicenter, parallel group study. *Cephalalgia* 1999; **19:** 581–8.
3. Tfelt-Hansen P. The effectiveness of combined oral lysine acetylsalicylate and metoclopramide (Migpriv) in the treatment of migraine attacks: comparison with placebo and oral sumatriptan. *Funct Neurol* 2000; **15** (suppl 3): 196–201.

Nasal polyps. Two long-term controlled studies[1] suggested that topical (endonasal) lysine aspirin may be effective in preventing the recurrence of nasal polyps after surgical removal (see p.1508) in both aspirin-tolerant and aspirin-sensitive patients. This effect may be attributed to the non-specific anti-inflammatory properties of lysine aspirin. Although no adverse effects were reported in this study, hypersensitivity reactions have been seen after use of salicylates in the presence of nasal polyps (see Hypersensitivity under Adverse Effects of Aspirin, p.21).

In another study[2] intranasal lysine aspirin did not show significant clinical benefit in preventing the recurrence of nasal polyps when compared with placebo. However, significant improvement at a microscopic level was noted.

1. Nucera E, *et al.* Effects of lysine-acetylsalicylate (LAS) treatment in nasal polyposis: two controlled long term prospective follow up studies. *Thorax* 2000; **55** (suppl 2): S75–78.
2. Parikh AA, Scadding GK. Intranasal lysine-aspirin in aspirin-sensitive nasal polyposis: a controlled trial. *Laryngoscope* 2005; **115:** 1385–90.

Preparations

Proprietary Preparations (details are given in Part 3)
Arg.: Aspirina; Corplus†; Decitriol; Yectaspirin; ***Belg.:*** Aspegic; Cardegic; ***Cz.:*** Aspegic†; Dolorosan†; Kardegic; ***Fr.:*** Aspegic; Cardiosolupsan; Kardegic; ***Ger.:*** Aspisol†; ***Gr.:*** Aspicalm; Egicalm; Egicalm Cardio; ***Hung.:*** Aspegic; Kardegic; Kardiren†; ***Israel:*** Lysoprin†; ***Ital.:*** Aspegic; Aspidol†; Cardirene; Flectadol; ***Malaysia:*** Aspegic†; ***Mex.:*** Coraspir; Kardegic; ***Neth.:*** Aspegic; Cardegic; ***Pol.:*** Laspal; ***Port.:*** Aspegic; Inesprin; Intraspir; Kardegic; Lisaspin; Tiplac†; ***Span:*** ASL; Inyesprin; Lysinotol†; Solusprin†; ***Switz.:*** Alcacyl instantanee; Aspegic; Kardegic; ***Venez.:*** Asalis†.

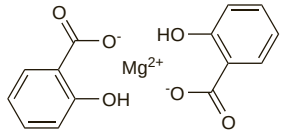
Multi-ingredient: ***Belg.:*** Migpriv; ***Chile:*** Dolotol 12; ***Cz.:*** Migpriv†; ***Denm.:*** Migpriv†; ***Fin.:*** Migpriv; ***Fr.:*** Aspegic Codeine†; Migpriv; ***Gr.:*** Premig; ***Hung.:*** Migpriv; ***Ital.:*** Migpriv; Migraprim; ***Mex.:*** Antigram; ***Neth.:*** Migrafin; ***Norw.:*** Migpriv†; ***Pol.:*** Migpriv; ***Spain:*** Fluxal†; ***Swed.:*** Migpriv; ***Switz.:*** Migpriv; ***UK:*** Migramax.

Magnesium Salicylate

Salicilato magnésico.

Магния Салицилат

$C_{14}H_{10}MgO_6.4H_2O$ = 370.6.
CAS — 18917-89-0 (anhydrous magnesium salicylate); 18917-95-8 (magnesium salicylate tetrahydrate).



Pharmacopoeias. In *Chin.* and *US.*
USP 31 (Magnesium Salicylate). A white, odourless, efflorescent, crystalline powder. Soluble in water and in alcohol; slightly soluble in ether; freely soluble in methyl alcohol. Store in airtight containers.

Adverse Effects, Treatment, and Precautions

As for Aspirin, p.20. Magnesium salicylate should also be used with caution in renal impairment because of the risk of hypermagnesaemia.

The use of aspirin and other acetylated salicylates is generally not recommended for children because of the risk of Reye's syndrome, unless specifically indicated. Some licensed drug information extends this precaution to magnesium salicylate.

Interactions

For interactions associated with salicylates, see Aspirin, p.23.

Uses and Administration

Magnesium salicylate has analgesic, anti-inflammatory, and antipyretic actions similar to those of aspirin (see p.23). Anhydrous magnesium salicylate 1 g is equivalent to about 1.2 g of aspirin. It is used in the treatment of pain and fever and has been used in the management of inflammatory conditions such as osteoarthritis, rheumatoid arthritis, and other arthritides. Usual oral doses of magnesium salicylate, expressed in terms of anhydrous magnesium salicylate, are about 300 to 600 mg every 4 hours for pain or fever.

Preparations

USP 31: Magnesium Salicylate Tablets.

Proprietary Preparations (details are given in Part 3)
Arg.: Rati Salil E†; ***Canad.:*** Herbogesic; ***USA:*** Backache Maximum Strength Relief; Bayer Select Maximum Strength Backache; Doans; Magan; Mobidin; Momentum Muscular Backache Formula; MST; Novasal; Nuprin Backache†.

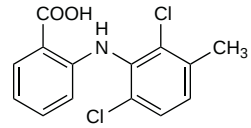
Multi-ingredient: ***Cz.:*** Cholagol; ***Hung.:*** Cholagol; ***Rus.:*** Cholagol (Холагол); ***USA:*** Cafgesic Forte; Combiflex ES; Durabac Forte; Extra Strength Doans PM; Mobigesic; Painaid BRF Back Relief Formula; Tetra-Mag.

Meclofenamic Acid *(BAN, USAN, rINN)*

Acide Méclofénamique; Ácido meclofenámico; Acidum Meclofenamicum; CI-583; INF-4668. *N*-(2,6-Dichloro-*m*-tolyl)anthranilic acid.

Меклофенамовая Кислота

$C_{14}H_{11}Cl_2NO_2$ = 296.1.
CAS — 644-62-2.
ATC — M01AG04; M02AA18.
ATC Vet — QM01AG04; QM02AA18.



Pharmacopoeias. In *BP(Vet).*
BP(Vet) 2008 (Meclofenamic Acid). A white or almost white, crystalline powder. Practically insoluble in water; slightly soluble in alcohol and in chloroform; sparingly soluble in ether; soluble in dimethylformamide and in 1M sodium hydroxide.

Meclofenamate Sodium *(BANM, USAN, rINNM)*

Méclofénamate de Sodium; Meclofenamato sódico; Natrii Meclofenamas.

Натрий Меклофенамат

$C_{14}H_{10}Cl_2NNaO_2.H_2O$ = 336.1.
CAS — 6385-02-0.

Pharmacopoeias. In *US.*
USP 31 (Meclofenamate Sodium). A white to creamy white, odourless to almost odourless, crystalline powder. Freely soluble in water, the solution sometimes being somewhat turbid due to partial hydrolysis and absorption of carbon dioxide; the solution is clear above pH 15. Slightly soluble in chloroform; practically insoluble in ether; soluble in methyl alcohol. Store in airtight containers. Protect from light.

Adverse Effects, Treatment, and Precautions

As for NSAIDs in general, p.96.

Incidence of adverse effects. The commonest adverse effect in 2500 patients given meclofenamate sodium was gastrointestinal disturbance.[1] Diarrhoea occurred in 11.2% of patients in double-blind studies and 32.8% of patients in long-term studies (up to 3 years). Ulcers were detected in 22 patients during therapy and skin rashes occurred in 4% of patients. Transient increases in serum aminotransferases and BUN occurred in some patients.

1. Preston SN. Safety of sodium meclofenamate (Meclomen™). *Curr Ther Res* 1978; **23** (suppl 4S): S107–12.

Effects on the blood. Case reports of agranulocytosis[1] and thrombocytopenia[2] associated with meclofenamate therapy.

1. Wishner AJ, Milburn PB. Meclofenamate sodium-induced agranulocytosis and suppression of erythropoiesis. *J Am Acad Dermatol* 1985; **13:** 1052–3.
2. Rodriguez J. Thrombocytopenia associated with meclofenamate. *Drug Intell Clin Pharm* 1981; **15:** 999.

Interactions

For interactions associated with NSAIDs, see p.99.

Pharmacokinetics

Meclofenamate sodium is readily absorbed when given orally. Peak plasma concentrations occur about 0.5 to 2 hours after ingestion. Meclofenamate is over 99% bound to plasma proteins. The plasma elimination half-life of meclofenamate sodium is about 2 to 4 hours. It is metabolised by oxidation, hydroxylation, dehalogenation, and conjugation with glucuronic acid and excreted in urine mainly as glucuronide conjugates of the metabolites. About 20 to 30% is recovered in the faeces. One of the metabolites, a 3-hydroxymethyl compound, is reported to be active although to a lesser extent than the parent drug.

◊ References.

1. Koup JR, *et al.* A single and multiple dose pharmacokinetic and metabolism study of meclofenamate sodium. *Biopharm Drug Dispos* 1990; **11:** 1–15.

Uses and Administration

Meclofenamic acid, an anthranilic acid derivative similar to mefenamic acid (below), is an NSAID (p.99). It is given orally as the sodium salt in musculoskeletal and joint disorders such as

osteoarthritis and rheumatoid arthritis, in mild to moderate pain, and in dysmenorrhoea and menorrhagia.

Doses of meclofenamate sodium are expressed in terms of the equivalent amount of meclofenamic acid. Meclofenamic acid 100 mg is equivalent to about 113.5 mg of meclofenamate sodium. In arthritic conditions it is given in doses equivalent to 200 to 400 mg daily; daily doses are usually given in 3 or 4 divided doses. For relief of mild to moderate pain doses are 50 to 100 mg every 4 to 6 hours; the daily dose should not exceed 400 mg. The dose in the treatment of dysmenorrhoea and menorrhagia is 100 mg three times daily for up to 6 days during menstruation.

Meclofenamic acid has been given as a rectal suppository and is also used in veterinary medicine.

Preparations

USP 31: Meclofenamate Sodium Capsules.

Proprietary Preparations (details are given in Part 3)
Chile: Meclomen; ***Ital.:*** Lenidolor; Meclodol†; Movens; ***Spain:*** Meclomen†.

Mefenamic Acid *(BAN, USAN, rINN)*

Acide méfénamique; Ácido mefenámico; Acidum mefenamicum; CI-473; CN-35355; INF-3355; Kwas mefenamowy; Kyselina mefenamová; Mefenaamihappo; Mefenamik Asit; Mefenaminsav; Mefenamo rūgštis; Mefenamsyra. *N*-(2,3-Xylyl)anthranilic acid.

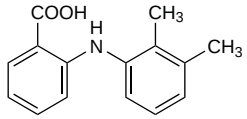
Мефенамовая Кислота

$C_{15}H_{15}NO_2$ = 241.3.

CAS — 61-68-7.

ATC — M01AG01.

ATC Vet — QM01AG01.



Pharmacopoeias. In *Chin.*, *Eur.* (see p.vii), *Jpn*, and *US*.
Ph. Eur. 6.2 (Mefenamic Acid). A white to almost white, microcrystalline powder. Practically insoluble in water; slightly soluble in alcohol and in dichloromethane; dissolves in dilute solutions of alkali hydroxides.
USP 31 (Mefenamic Acid). A white to off-white, crystalline powder. Practically insoluble in water; slightly soluble in alcohol and in methyl alcohol; sparingly soluble in chloroform; soluble in solutions of alkali hydroxides. Store in airtight containers. Protect from light.

Adverse Effects, Treatment, and Precautions

As for NSAIDs in general, p.96.

Treatment should be stopped if diarrhoea and rashes occur. Other effects reported include drowsiness, and effects on the blood such as thrombocytopenia, occasionally haemolytic anaemia, and rarely aplastic anaemia. Convulsions may occur on overdosage.

Mefenamic acid is contra-indicated in patients with inflammatory bowel disease. Licensed product information recommends that blood counts and liver and renal function should be monitored during long-term therapy. Drowsiness may affect the performance of skilled tasks.

Mefenamic acid may give a false positive in some tests for the presence of bile in the urine.

Breast feeding. No adverse effects have been seen in breast-fed infants whose mothers were given mefenamic acid, and the American Academy of Pediatrics considers[1] that it is therefore usually compatible with breast feeding. The *BNF* also considers that the amount of mefenamic acid distributed into breast milk is too small to be harmful to a breast-fed infant. An early study[2] confirms that the distribution of mefenamic acid into breast milk is minimal. However, licensed product information contra-indicates the use of mefenamic acid in nursing mothers.

1. American Academy of Pediatrics. The transfer of drugs and other chemicals into human milk. *Pediatrics* 2001; **108:** 776–89. Correction. *ibid.*; 1029. Also available at: http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/3/776 (accessed 08/11/07)
2. Buchanan RA, *et al.* The breast milk excretion of mefenamic acid. *Curr Ther Res* 1968; **10:** 592–6.

Effects on the blood. References to haematological reactions in patients taking mefenamic acid including haemolytic anaemia,[1] leucopenia,[2] neutropenia,[3] and agranulocytosis.[4]

1. Scott GL, *et al.* Autoimmune haemolytic anaemia and mefenamic acid therapy. *BMJ* 1968; **3:** 534–5.
2. Burns A, Young RE. Mefenamic acid induced leucopenia in the elderly. *Lancet* 1984; **ii:** 46.
3. Handa SI, Freestone S. Mefenamic acid-induced neutropenia and renal failure in elderly females with hypothyroidism. *Postgrad Med J* 1990; **66:** 557–9.
4. Muroi K, *et al.* Treatment of drug-induced agranulocytosis with granulocyte-colony stimulating factor. *Lancet* 1989; **ii:** 55.

Effects on the gastrointestinal tract. Reversible steatorrhoea has occurred[1] with mefenamic acid; it may also provoke colitis in patients without a history of this condition.[2]

1. Marks JS, Gleeson MH. Steatorrhoea complicating therapy with mefenamic acid. *BMJ* 1975; **4:** 442.
2. Ravi S, *et al.* Colitis caused by non-steroidal anti-inflammatory drugs. *Postgrad Med J* 1986; **62:** 773–6.

Effects on the kidneys. Nonoliguric renal failure has occurred in elderly patients who had had diarrhoea and vomiting while taking mefenamic acid and had continued to take the drug. It is normally recommended that mefenamic acid be stopped in the event of diarrhoea and it was suggested that in these patients the gastrointestinal toxicity had led to fluid and electrolyte depletion, thus predisposing these patients to mefenamic acid's nephrotoxicity.[1] There has been a subsequent report[2] of nonoliguric renal failure in elderly patients given mefenamic acid for musculoskeletal pain.

1. Taha A, *et al.* Non-oliguric renal failure during treatment with mefenamic acid in elderly patients: a continuing problem. *BMJ* 1985; **291:** 661–2.
2. Grant DJ, MacConnachie AM. Mefenamic acid is more dangerous than most. *BMJ* 1995; **311:** 392.

Effects on the skin. Bullous pemphigoid, together with haemolytic anaemia and diarrhoea,[1] and fixed drug eruptions[2-4] have been associated with the use of mefenamic acid. Additionally, Stevens-Johnson syndrome, together with cholestatic hepatitis and haemolytic anaemia, in one patient has been attributed to mefenamic acid.[5] It is generally recommended that mefenamic acid should be withdrawn if skin reactions develop.

1. Shepherd AN, *et al.* Mefenamic acid-induced bullous pemphigoid. *Postgrad Med J* 1986; **62:** 67–8.
2. Wilson CL, Otter A. Fixed drug eruption associated with mefenamic acid. *BMJ* 1986; **293:** 1243.
3. Long CC, *et al.* Fixed drug eruption to mefenamic acid: a report of three cases. *Br J Dermatol* 1992; **126:** 409–11.
4. Rallis E. 'Dalmatian dog'-like skin eruption (two cases of multifocal fixed drug eruption induced by mefenamic acid). *J Eur Acad Dermatol Venereol* 2005; **19:** 753–5.
5. Chan JCN, *et al.* A case of Stevens-Johnson syndrome, cholestatic hepatitis and haemolytic anaemia associated with use of mefenamic acid. *Drug Safety* 1991; **6:** 230–4.

Overdosage. Mefenamic acid overdose has been associated with CNS toxicity, especially with convulsions.[1] Coma[2,3] has also been reported.

1. Court H, Volans GN. Poisoning after overdose with non-steroidal anti-inflammatory drugs. *Adverse Drug React Acute Poisoning Rev* 1984; **3:** 1–21.
2. Gössinger H, *et al.* Coma in mefenamic acid poisoning. *Lancet* 1982; **ii:** 384.
3. Hendrickse MT. Mefenamic acid overdose mimicking brainstem stroke. *Lancet* 1988; **ii:** 1019.

Pancreatitis. A report of pancreatitis associated with mefenamic acid.[1]

1. van Walraven AA, *et al.* Pancreatitis caused by mefenamic acid. *Can Med Assoc J* 1982; **126:** 894.

Porphyria. Mefenamic acid is considered to be unsafe in patients with porphyria although there is conflicting experimental evidence of porphyrinogenicity.

Interactions

For interactions associated with NSAIDs, see p.99.

Pharmacokinetics

Mefenamic acid is absorbed from the gastrointestinal tract. Peak plasma concentrations occur about 2 to 4 hours after ingestion. The plasma elimination half-life is reported to be about 2 to 4 hours. Mefenamic acid is more than 90% bound to plasma proteins. It is distributed into breast milk. Mefenamic acid is metabolised by the cytochrome P450 isoenzyme CYP2C9 to 3-hydroxymethyl mefenamic acid, which may then be oxidised to 3-carboxymefenamic acid. Over 50% of a dose may be recovered in the urine, as unchanged drug or, mainly, as conjugates of mefenamic acid and its metabolites.

Uses and Administration

Mefenamic acid, an anthranilic acid derivative, is an NSAID (p.99), although its anti-inflammatory properties are considered to be minor.

It is used in mild to moderate pain including headache, dental pain, postoperative and postpartum pain, and dysmenorrhoea, in musculoskeletal and joint disorders such as osteoarthritis and rheumatoid arthritis, and in menorrhagia.

In the UK, the usual oral dose is 500 mg three times daily. US licensed product information recommends an initial dose of 500 mg followed by 250 mg every 6 hours as needed. In addition, in the USA, when mefenamic acid is used in the treatment of mild to moderate pain in adults and adolescents aged 14 years and over, it is also recommended that it should not be given for longer than 7 days at a time.

For doses of mefenamic acid in children, see below.

Administration in children. In the UK, licensed product information states that mefenamic acid may be used in children for the treatment of Still's disease (see Juvenile Idiopathic Arthritis, p.10) and fever; however, the *BNFC* does not recommend mefenamic acid for juvenile idiopathic arthritis, nor for postoperative or mild to moderate pain. A suggested oral dose of mefenamic acid for children over 6 months of age is 25 mg/kg daily in divided doses. Treatment in children should be given for no longer than 7 days unless they are receiving mefenamic acid for juvenile idiopathic arthritis.

Preparations

BP 2008: Mefenamic Acid Capsules; Mefenamic Acid Tablets;
USP 31: Mefenamic Acid Capsules.

Proprietary Preparations (details are given in Part 3)
Arg.: Ponstil; ***Austral.:*** Mefic; Ponstan; ***Austria:*** Parkemed; ***Braz.:*** Ponstan; Pontin†; ***Canad.:*** Ponstan†; ***Chile:*** Algex; Algifemin; Dolcin†; Flipal; Sicadol; Tanston; Templadol; ***Fin.:*** Ponstan; ***Fr.:*** Ponstyl; ***Ger.:*** Parkemed†; Ponalar†; ***Gr.:*** Acinic; Aidol; Ponstan; Vidan; ***Hong Kong:*** Dyspen†; Hamitan; Hostan; Medicap; Mefa; Mefamic; Mefic; Namic; Napan; Pekaso; Ponstan; Pontacid; Sefmic; ***Hung.:*** Ponmel; ***India:*** Dysmen-500†; Ponstan; ***Indon.:*** Analspec; Asam; Asimat; Benostan; Cetalmic; Corstanal; Datan; Dolfenal; Dolos; Dystan; Femisic; Fensik; Gitaramin; Lapistan; Licostan; Mectan; Mefast; Mefinal; Mefinter; Mefix; Menin; Molasic; Nichostan; Opistan; Ponalar; Poncofen; Pondex; Ponsamic; Ponstan; Ponstelax; Stanalin; Stanza; Stelpon; Topgesic; Tropistan; ***Irl.:*** Mefac; Ponalgic; Ponmel; Ponstan; ***Ital.:*** Lysalgo; ***Malaysia:*** Beafemic; Mefen†; Mefic; Namic; Napan; Pongesic†; Ponstan; Pontalon; ***Mex.:*** Artriden; Namifen; Ponstan; ***NZ:*** Ponstan; ***Philipp.:*** Acidan; Afligec; Analcid; Aprostal; Atmose; Calibral; Dolfenal; Dolmetine; Dolsten; Escandar; Eurostan; Finox; Gardan; Gisfen; Hispen; Inflasic; Istan; Kramon; Laffed; Mecid A; Mefenax; Metaflam; Neostan; Penomor; Ponser; Ponstan; Pontaser; Ralgec; Revalan; Selmac; Senflam; Spegic; Suprazen; Tynostan; Vamgesic; Vandifen; Zanovic; ZapAn; Zestan; ***Pol.:*** Mefacit; ***Port.:*** Ponstan; ***S.Afr.:*** Fenamin; Ponac; Ponstan; Ponstel; ***Singapore:*** Beafemic; Mefacap†; Mefenix; Ponstan†; Pontalon; Ponty†; ***Spain:*** Coslan; ***Switz.:*** mefe-basan†; Mefenacide; Melur; Mephadolor; Ponstan; Spiralgine; ***Thai.:*** Conamic; Dolfen; Dolfenal†; Dyspen†; Femen; Fenamic; Gandin; Manic; Manomic; Masafen; Mednil; Mefa; Mefen; Mefenan; Namic; Painnox; Panamic; Pefamic†; Pondnadysmen; Ponnesia; Ponstan; Prostan; Pynamic; Sefmic; Vestan; ***Turk.:*** Ponstan; Rolan; ***UK:*** Dysman†; Ponstan; ***USA:*** Ponstel; ***Venez.:*** Ponstan.

Multi-ingredient: ***India:*** Cyclo-Meff; Dysmen; Dysmen Forte; Meftal Forte; Spasmonil Forte; Spasmonil Plus; Tranfib MF; Ze-Spas; ***Thai.:*** Difemic; Mainnox; Med-Anspasmic†.

Meloxicam *(BAN, USAN, rINN)*

Meloksikaami; Meloksikam; Méloxicam; Meloxicamum; Meloxikam; UH-AC-62; UH-AC-62XX. 4-Hydroxy-2-methyl-*N*-(5-methyl-2-thiazolyl)-2*H*-1,2-benzothiazine-3-carboxamide 1,1-dioxide.

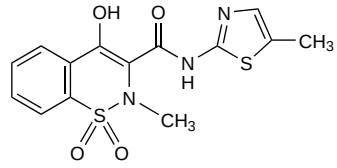
Мелоксикам

$C_{14}H_{13}N_3O_4S_2$ = 351.4.

CAS — 71125-38-7.

ATC — M01AC06.

ATC Vet — QM01AC06.



Pharmacopoeias. In *Br.*, *Chin.*, and *US*.
BP 2008 (Meloxicam). A pale yellow powder. Practically insoluble in water; very slightly soluble in alcohol and in methyl alcohol; slightly soluble in acetone; soluble in dimethylformamide.
USP 31 (Meloxicam). A pale yellow powder. Practically insoluble in water; very slightly soluble in alcohol and in methyl alcohol; slightly soluble in acetone; soluble in dimethylformamide.

Adverse Effects and Treatment

As for NSAIDs in general, p.96.

Incidence of adverse effects. Between September 1996, when meloxicam was first marketed in the UK, and mid-June 1998 the UK CSM had received a total of 773 reports of 1339 suspected adverse reactions for meloxicam.[1] Of all the reactions 41% were gastrointestinal and of these 18% involved gastrointestinal perforation, ulceration and/or bleeding; the mean age of the patients involved was 64 years. Although most patients recovered after withdrawal of meloxicam and/or treatment, 5 died. A total of 193 reactions involved the skin, the most common being pruritus, rash, and urticaria. There were also reports of angioedema (25), photosensitivity (12), and bullous dermatoses,