

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Ibuprofen 100 mg/5 ml oral suspension
Tesco Health Ibuprofen 100 mg/5 ml Oral Suspension
Bell's Healthcare Children's Pain and Fever Relief 100 mg/5 ml Oral Suspension
Superdrug Children's Pain and Fever Relief 100 mg/5 ml Oral Suspension
Almus Children's Pain and Fever Relief 100 mg/5 ml Oral Suspension

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Per 5 ml of suspension contains 100 mg of ibuprofen

Excipients with known effects

- per 5 ml of suspension contains 1375 mg liquid maltitol
- per 5 ml of suspension contains 8.60 mg sodium methyl parahydroxybenzoate
- per 5 ml of suspension contains 2.25 mg sodium propyl parahydroxybenzoate
- per 5 ml of suspension contains 0.48 mmol sodium

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Oral suspension.

White-coloured, orange-flavoured oral suspension.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

For the fast and effective reduction of fever, including post immunisation pyrexia and the fast and effective relief of the symptoms of colds and influenza and mild to moderate pain, such as a sore throat, teething pain, toothache, headache, minor aches and sprains.

4.2 Posology and method of administration

Posology

The lowest effective dose should be used for the shortest duration necessary to relieve symptoms (see section 4.4).

For short term use only.

The recommended daily dose of the product is 20 – 30 mg per kg of body weight, divided into equal doses, with dosing intervals of 6 to 8 hours. Leave at least 4 hours between doses and do not take more than the recommended dose in 24 hours. The recommended dose should not be exceeded.

Using the spoon or syringe dosing device provided this can be achieved as follows:

| Age | Body weight (kg) | Recommended dosage |
|--|------------------|--|
| Infants 3-6 months weighing more than 5 kg | 5-7.6 | one 2.5 ml dose may be taken 3 times in 24 hours |
| Infants 6-12 months | 7.7-9 | one 2.5 ml dose may be taken 3 to 4 times in 24 hours |
| Children 1-3 years | 10-16 | one 5 ml dose may be taken 3 times in 24 hours |
| Children 4-6 years | 17-20 | 7.5ml (5 ml +2.5 ml spoonful) may be taken 3 times in 24 hours |
| Children 7-9 years | 21-30 | two 5 ml doses may be taken 3 times in 24 hours |

Not suitable for children under 3 months of age.

Do not use this product in children weighing less than 5 kg.

For infants aged 3-6 months medical advice should be sought if symptoms worsen or not later than 24 hours if symptoms persist.

If in children aged from 6 months this medicinal product is required for more than 3 days, or if symptoms worsen a doctor should be consulted.

Special patient groups:

- For post-immunisation pyrexia: One 2.5 ml dose followed by one further 2.5 ml dose 6 hours later if necessary. Do not exceed two 2.5ml doses in 24 hours. If the fever is not reduced, consult a doctor.

Method of administration

For oral administration.

For patients with sensitive stomachs the product can be taken with or after food.

4.3 Contraindications

Hypersensitivity to ibuprofen or to any of the excipients listed in section 6.1.

- Patients who have previously shown hypersensitivity reactions (e.g. asthma, rhinitis, angioedema or urticaria) in response to ibuprofen, acetylsalicylic acid (aspirin) or other non-steroidal anti-inflammatory drugs (NSAIDs).
- Active or a history of recurrent peptic ulcer/haemorrhage (two or more distinct episodes of proven ulceration or bleeding).
- History of gastrointestinal bleeding or perforation, related to previous NSAIDs therapy.
- Severe hepatic failure, renal failure or severe heart failure (See section 4.4, Special warnings and precautions for use).
- Last trimester of pregnancy (See section 4.6 Pregnancy and lactation).

4.4 Special warnings and precautions for use

Undesirable effects may be minimised by using the lowest effective dose for the shortest duration necessary to control symptoms (see section 4.2, and GI and cardiovascular risks below).

The elderly have an increased frequency of adverse reactions to NSAIDs especially gastrointestinal bleeding and perforation which may be fatal.

Respiratory:

Bronchospasm may be precipitated in patients suffering from or with a previous history of bronchial asthma or allergic disease.

Other NSAIDs:

The use of Ibuprofen with concomitant NSAIDs including cyclooxygenase-2 selective inhibitors should be avoided (see section 4.5).

SLE and mixed connective tissue disease:

Systemic lupus erythematosus and mixed connective tissue disease, due to increased risk of aseptic meningitis (see section 4.8).

Cardiovascular and cerebrovascular effects:

Caution (discussion with doctor or pharmacist) is required prior to starting treatment in patients with a history of hypertension and/or heart failure as fluid retention, hypertension and oedema have been reported in association with NSAID therapy.

Clinical trial and epidemiological data suggest that use of ibuprofen, particularly at high doses (2400mg daily) and in long-term treatment may be associated with a small increased risk of arterial thrombotic events (for example myocardial infarction or stroke). Overall, epidemiological studies do not suggest that low

dose ibuprofen (e.g., ≤ 1200 mg/day) is associated with an increased risk of myocardial infarction.

Renal:

Renal impairment as renal function may further deteriorate (See section 4.3 Contraindications and Section 4.8 Undesirable effects).

There is a risk of renal impairment in dehydrated children (See section 4.3 and 4.8).

Renal tubular acidosis and hypokalaemia may occur following acute overdose and in patients taking ibuprofen products over long periods at high doses (typically greater than 4 weeks), including doses exceeding the recommended daily dose.

Hepatic:

Hepatic dysfunction (See section 4.3 and 4.8).

Impaired female fertility:

There is limited evidence that drugs which inhibit cyclo-oxygenase/prostaglandin synthesis may cause impairment of female fertility by an effect on ovulation. This is reversible upon withdrawal of treatment.

Gastrointestinal effects:

NSAIDs should be given with care to patients with a history of gastrointestinal disease (ulcerative colitis, Crohn's disease) as their conditions may be exacerbated (see section 4.8).

Gastrointestinal bleeding, ulceration or perforation, which can be fatal, has been reported with all NSAIDs at any time during treatment, with or without warning symptoms or a previous history of serious GI events.

The risk of GI bleeding, ulceration or perforation is higher with increasing NSAID doses, in patients with a history of ulcer, particularly if complicated with haemorrhage or perforation (see section 4.3), and in the elderly. These patients should commence treatment on the lowest dose available.

Patients with a history of GI toxicity, particularly when elderly, should report any unusual abdominal symptoms (especially GI bleeding) particularly in the initial stages of treatment.

Caution should be advised in patients receiving concomitant medications which could increase the risk of ulceration or bleeding, such as oral corticosteroids, anticoagulants such as warfarin, selective serotonin-reuptake inhibitors or antiplatelet agents such as acetylsalicylic acid (aspirin) (see section 4.5).

When GI bleeding or ulceration occurs in patients receiving ibuprofen, the treatment should be withdrawn.

Dermatological:

Serious skin reactions, some of them fatal, including exfoliative dermatitis, Stevens-Johnson syndrome, and toxic epidermal necrolysis, have been reported

very rarely in association with the use of NSAIDs (see section 4.8). Patients appear to be at highest risk for these reactions early in the course of therapy: the onset of the reaction occurring in the majority of cases within the first month of treatment. Acute generalised exanthematous pustulosis (AGEP) has been reported in relation to ibuprofen-containing products. Ibuprofen should be discontinued at the first appearance of skin rash, mucosal lesions, or any other sign of hypersensitivity.

Exceptionally, varicella can be at the origin of serious cutaneous and soft tissues infectious complications. To date, the contributing role of NSAIDs in the worsening of these infections cannot be ruled out. Thus, it is advisable to avoid use of Ibuprofen 100mg/5ml Oral suspension in case of varicella.

Masking of symptoms of underlying infections

Ibuprofen 100mg/5ml Oral suspension can mask symptoms of infection, which may lead to delayed initiation of appropriate treatment and thereby worsening the outcome of the infection. This has been observed in bacterial community acquired pneumonia and bacterial complications to varicella. When Ibuprofen 100mg/5ml Oral suspension is administered for fever or pain relief in relation to infection, monitoring of infection is advised. In non-hospital settings, the patient should consult a doctor if symptoms persist or worsen.

This product contains Maltitol. Patients with rare hereditary problems of fructose intolerance should not take this medicine.

The label will include:

Read the leaflet before use.

Warning: do not take more medicine than the label tells you to.

Do not give this product if the child:

- is under 3 months old or weighs less than 5 kg
- has (or has had two or more episodes of a stomach ulcer, perforation or bleeding
- is allergic to ibuprofen or any other ingredient of the product, aspirin or other related painkillers, or fructose
- is taking other NSAID painkillers, or aspirin with a daily dose above 75mg

Consult a doctor or pharmacist before use for:

- someone who has or had asthma, diabetes, high cholesterol, high blood pressure, a stroke, heart, liver, kidney or bowel problem; is dehydrated; has chicken pox
- smokers
- pregnant, breastfeeding or women trying to get pregnant
- elderly

You must consult a doctor if symptoms persist or worsen, or if the medicine is needed:

- for more than 24h for a child of 3 to 6 months
- for more than 3 days for a child over 6 months

4.5 Interaction with other medicinal products and other forms of interaction

Ibuprofen should be avoided in combination with:

- *Acetylsalicylic Acid (Aspirin)*: Unless low-dose aspirin (not above 75 mg daily) has been advised by a doctor, as this may increase the risk of adverse reactions (see section 4.4).
- Experimental data suggest that ibuprofen may inhibit the effect of low dose acetylsalicylic Acid (Aspirin) on platelet aggregation when they are dosed concomitantly. However, the limitations of these data and the uncertainties regarding extrapolation of ex vivo data to the clinical situation imply that no firm conclusions can be made for regular ibuprofen use, and no clinically relevant effect is considered to be likely for occasional ibuprofen use (see section 5.1).
- *Other NSAIDs including cyclooxygenase-2 selective inhibitors*: Avoid concomitant use of two or more NSAIDs as this may increase the risk of adverse effects (see section 4.4).

Ibuprofen should be used with caution in combination with:

Anticoagulants: NSAIDs may enhance the effects of anti-coagulants, such as warfarin (See section 4.4).

Antihypertensives (ACE inhibitors and Angiotensin II Antagonists) and diuretics: NSAIDs may diminish the effect of these drugs. Diuretics can increase the risk of nephrotoxicity of NSAIDs.

Corticosteroids: increased risk of gastrointestinal ulceration or bleeding (see Section 4.4).

Anti-platelet agents and selective serotonin reuptake inhibitors (SSRIs): increased risk of gastrointestinal bleeding (see section 4.4).

Cardiac glycosides: NSAIDs may exacerbate cardiac failure, reduce GFR and increase plasma glycoside levels.

Lithium: There is evidence for potential increases in plasma levels of lithium.

Methotrexate: There is a potential for an increase in plasma levels of methotrexate.

Ciclosporin: Increased risk of nephrotoxicity.

Mifepristone: NSAIDs should not be used for 8-12 days after mifepristone administration as NSAIDs can reduce the effect of mifepristone.

Tacrolimus: Possible increased risk of nephrotoxicity when NSAIDs are given with tacrolimus.

Zidovudine: Increased risk of haematological toxicity when NSAIDs are given with zidovudine. There is evidence of an increased risk of haemarthroses and haematoma in HIV (positive) haemophiliacs receiving concurrent treatment with zidovudine and ibuprofen.

Quinolone antibiotics: Animal data indicate that NSAIDs can increase the risk of convulsions associated with quinolone antibiotics. Patients taking NSAIDs and quinolones may have an increased risk of developing convulsions.

4.6 Fertility, pregnancy and lactation

Pregnancy

Inhibition of prostaglandin synthesis may adversely affect the pregnancy and/or embryo/foetal development. Data from epidemiological studies suggest an increased risk of miscarriage and of cardiac malformation and gastroschisis after the use of a prostaglandin synthesis inhibitor in early pregnancy. The absolute risk for cardiovascular malformation was increased from less than 1%, up to approximately 1.5%. The risk is believed to increase with dose and duration of therapy. In animals, administration of a prostaglandin synthesis inhibitor has been shown to result in increased pre- and post-implantation loss and embryo-foetal lethality.

In addition, increased incidences of various malformations, including cardiovascular, have been reported in animals given a prostaglandin synthesis inhibitor during the organogenetic period.

During the first and second trimester of pregnancy, ibuprofen should not be given unless clearly necessary. If ibuprofen is used by a woman attempting to conceive, or during the first or second trimester of pregnancy, the dose should be kept as low and duration of treatment as short as possible.

During the third trimester of pregnancy, all prostaglandin synthesis inhibitors may expose the foetus to the following:

- Cardiopulmonary toxicity (with premature closure of the ductus arteriosus and pulmonary hypertension)
- Renal dysfunction, which may progress to renal failure with oligohydramnios.

The mother and the neonate, at the end of pregnancy, to:

- Possible prolongation of bleeding time, an anti-aggregating effect which may occur even at very low doses.
- Inhibition of uterine contractions, which may result in delayed or prolonged labour.

Consequently, Ibuprofen 100mg/5ml Oral suspension is contraindicated during the third trimester of pregnancy.

Breast-feeding

In the limited studies so far available, NSAIDs can appear in the breast milk in very low concentration and unlikely to affect the breast fed infant adversely.

Fertility

See section 4.4, regarding female fertility.

4.7 Effects on ability to drive and use machines

None expected at recommended doses and duration of therapy.

4.8 Undesirable effects

The following list of adverse effects relates to those experienced with ibuprofen at OTC doses (maximum 1200 mg ibuprofen per day), in short-term use. In the treatment of chronic conditions, under long-term treatment, additional adverse events may occur.

Adverse events which have been associated with ibuprofen are given below, tabulated by system organ class and frequency. Frequencies are defined as : very common ($\geq 1/10$), common ($\geq 1/100$ and $< 1/10$), uncommon ($\geq 1/1000$ and $< 1/100$), rare ($\geq 1/10,000$ and $< 1/1000$), very rare ($< 1/10,000$) and not known (cannot be estimated from the available data). Within each frequency grouping, adverse events are presented in order of decreasing seriousness.

The most commonly observed adverse events are gastrointestinal in nature.

| System Organ Class | Frequency | Adverse Events |
|---|-----------|---|
| Blood and Lymphatic System Disorders | Very rare | Haematopoietic disorders, anaemia, leucopenia, thrombocytopenia, pancytopenia and agranulocytosis ¹ |
| Immune System Disorders | Uncommon | Hypersensitivity with urticaria and pruritus ² |
| | Very rare | Severe hypersensitivity reactions, including facial, tongue and throat swelling, dyspnoea, tachycardia, and hypotension (anaphylaxis, angioedema or severe shock) ² |
| Nervous System Disorders | Uncommon | Headache |
| | Very rare | Aseptic meningitis ³ |
| Cardiac Disorders | Not known | Cardiac failure and oedema ⁴ |
| Vascular Disorders | Not known | Hypertension ⁴ |
| Respiratory, Thoracic and Mediastinal Disorders | Not known | Respiratory tract reactivity comprising asthma, bronchospasm or dyspnoea ² |
| Gastrointestinal Disorders | Uncommon | Abdominal pain, nausea and dyspepsia ⁵ |
| | Rare | Diarrhoea, flatulence, constipation and vomiting |
| | Very rare | Peptic ulcer, gastrointestinal perforation or gastrointestinal haemorrhage, melaena, and haematemesis ⁶ . Mouth ulceration and gastritis. Exacerbation of colitis and Crohn's disease ⁷ |
| Hepatobiliary Disorders | Very rare | Liver disorder |
| Skin and Subcutaneous Tissue Disorders | Uncommon | Skin rash ² |
| | Very rare | Bullous reactions, including Stevens-Johnson Syndrome, erythema multiforme and toxic epidermal necrolysis ² |
| | Not known | Drug reaction with eosinophilia and systemic symptoms (DRESS syndrome), |

| | | |
|------------------------------------|-----------|--|
| | | Acute generalised exanthematous pustulosis (AGEP), Photosensitivity reactions |
| Metabolism and Nutrition Disorders | Not known | Decreased Appetite Hypokalaemia* |
| Renal and Urinary Disorders | Very rare | Acute renal failure, papillary necrosis, especially in long-term use, associated with increased serum urea and oedema ⁸ |
| | Not known | Ureteric colic, dysuria Renal tubular acidosis* |
| Investigations | Very rare | Haemoglobin decreased |
| Infections and infestations | Not known | Exacerbation of infections related inflammation has been described, in exceptional cases, severe skin infections and soft-tissue complications may occur during a varicella infection. |

Description of Selected Adverse Reactions

1. First signs are fever, sore throat, superficial mouth ulcers, flu-like symptoms, severe exhaustion, unexplained bleeding and bruising.
2. Hypersensitivity reactions: These may consist of (a) non-specific allergic reactions and anaphylaxis, (b) respiratory tract reactivity, including asthma, aggravated asthma, bronchospasm, and dyspnoea, or (c) various skin reactions, including pruritus, urticaria, purpura, angioedema and, more rarely, exfoliative and bullous dermatoses, including toxic epidermal necrolysis, Stevens-Johnson Syndrome and erythema multiforme.
3. The pathogenic mechanism of drug-Induced aseptic meningitis is not fully understood. However, the available data on NSAID-related aseptic meningitis points to a hypersensitivity reaction (due to a temporal relationship with drug intake, and disappearance of symptoms after drug discontinuation). Of note, single cases of symptoms of aseptic meningitis (such as stiff neck, headache, nausea, vomiting, fever or disorientation) have been observed during treatment with ibuprofen in patients with existing auto-immune disorders (such as systemic lupus erythematosus and mixed connective tissue disease).
4. Clinical studies and epidemiological data suggest that use of ibuprofen (particularly at high doses 2400 mg /daily) and in long-term treatment may be associated with a small increased risk of arterial thrombotic events (e.g., myocardial infarction or stroke), (see section 4.4)
5. The adverse events observed most often are gastrointestinal in nature.
6. Sometimes fatal.
7. See section 4.4.
8. Especially in long-term use, associated with increased serum urea and oedema. Also includes papillary necrosis.

*Renal tubular acidosis and hypokalaemia have been reported in the post-marketing setting typically following prolonged use of the ibuprofen component at higher than recommended doses.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

In children ingestion of more than 400 mg/kg may cause symptoms. In adults the dose response effect is less clear-cut. The half-life in overdose is 1.5-3 hours.

Symptoms

Most patients who have ingested clinically important amounts of NSAIDs will develop no more than nausea, vomiting, epigastric pain, or more rarely diarrhoea. Tinnitus, headache and gastrointestinal bleeding are also possible.

In more serious poisoning, toxicity is seen in the central nervous system, manifesting as drowsiness, occasionally excitation and disorientation or coma. Occasionally patients develop convulsions. In serious poisoning metabolic acidosis may occur and the prothrombin time/ INR may be prolonged, probably due to interference with the actions of circulating clotting factors. Acute renal failure and liver damage may occur. Exacerbation of asthma is possible in asthmatics.

Prolonged use at higher than recommended doses may result in severe hypokalaemia and renal tubular acidosis. Symptoms may include reduced level of consciousness and generalised weakness (see section 4.4 and section 4.8).

Management

Management should be symptomatic and supportive and include the maintenance of a clear airway and monitoring of cardiac and vital signs until stable. Consider oral administration of activated charcoal if the patient presents within 1 hour of ingestion of a potentially toxic amount. If frequent or prolonged, convulsions should be treated with intravenous diazepam or lorazepam. Give bronchodilators for asthma.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Anti-inflammatory and anti-rheumatic product, non-steroid, propionic acid derivative.

ATC code: M01A E01.

Ibuprofen is a propionic acid derivative NSAID which has analgesic, antipyretic and anti-inflammatory properties. Ibuprofen inhibits prostaglandin synthesis, furthermore, ibuprofen reversibly inhibits platelet aggregation.

Experimental data suggest that ibuprofen may inhibit the effect of low dose aspirin on platelet aggregation when they are dosed concomitantly. In one study, when a single dose of ibuprofen 400 mg was taken with 8 h before or within 30 min after immediate release aspirin dosing (81 mg), a decreased effect of ASA on the formation of thromboxane or platelet aggregation occurred. However, the limitations of these data and the uncertainties regarding extrapolation of ex vivo data to the clinical situation imply that no firm conclusions can be made for regular ibuprofen use, and no relevant effect is considered to be likely for occasional use.

Clinical evidence demonstrates that:

- 5 mg/kg of ibuprofen can provide up to 6-hour fever relieving effect
- 6 mg/kg of ibuprofen and above can provide up to 8-hour fever relieving effect
- 5 mg/kg of ibuprofen and above can provide up to 8-hour pain relief

5.2 Pharmacokinetic properties

Ibuprofen is rapidly absorbed following administration and is rapidly distributed throughout the whole body. The excretion is rapid and complete via the kidneys.

Maximum plasma concentrations are reached 45 minutes after ingestion if taken on an empty stomach. When taken with food, peak levels are observed after 1 to 2 hours. These times may vary with different dosage forms.

The half-life of ibuprofen is about 2 hours.

In limited studies, ibuprofen appears in the breast milk in very low concentrations

5.3 Preclinical safety data

There are no pre-clinical safety data of relevance to the customer.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium methyl parahydroxybenzoate (E219),
Sodium propyl parahydroxybenzoate (E217),
Xanthan gum,
Carboxymethylcellulose sodium,
Microcrystalline cellulose,
Liquid maltitol (E965),

Citric acid monohydrate,
Sodium citrate,
Sodium benzoate,
Saccharin sodium,
Polysorbate 80,
Natural Orange Flavour,
Orange Sweet No 1 Flavour (which contains propylene glycol),
Purified water.

6.2 Incompatibilities

Not to be mixed with other medicinal products.

6.3 Shelf life

24 months.

6.4 Special precautions for storage

Do not store above 25°C.

Keep container in the outer carton and protect from light.

6.5 Nature and contents of container

An amber-coloured polyethylene terephthalate (PET) bottle containing 100ml Ibuprofen suspension sealed with a polypropylene, tamper-evident child resistant cap fitted with a low density polyethylene liner. The bottle contains 100ml product.

A double-ended spoon with measure of 2.5ml and 5ml is provided. Not all pack sizes may be marketed.

6.6 Special precautions for disposal

Shake well before use.

7 MARKETING AUTHORISATION HOLDER

Relonchem Limited,

Cheshire House

Gorse Lane

Widnes

Cheshire

WA8 0RP

United Kingdom

8 MARKETING AUTHORISATION NUMBER(S)

PL 20395/0259

**9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE
AUTHORISATION**

02/09/2011

10 DATE OF REVISION OF THE TEXT

28/11/2023