

# Summary of Product Characteristics

## 1 NAME OF THE MEDICINAL PRODUCT

Nurofen 200 mg Coated Tablets

## 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains Ibuprofen 200 mg.

Excipients with known effect: Sucrose 116.1mg per tablet.

For a full list of excipients, see section 6.1.

## 3 PHARMACEUTICAL FORM

Coated tablet.

White round sugar-coated tablet with 'NUROFEN' imprinted in black.

## 4 CLINICAL PARTICULARS

### 4.1 Therapeutic Indications

As an anti-inflammatory, analgesic and antipyretic for short term management of mild to moderate pain such as is associated with headache, dental pain, fever, period pain, muscular strain, backache and for the management of the symptoms of head colds and influenza.

For the symptomatic treatment of osteoarthritis.

### 4.2 Posology and method of administration

For oral administration and short-term use only.

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

The patients should consult a doctor if symptoms persist or worsen, or if the product is required for more than 10 days.

Adults and children over 12 years: Initial dose is 400mg and subsequently if necessary, 200 to 400mg every four hours with a maximum of 1200mg in a 24 hour period.

If in adolescents this medicinal product is required for more than 3 days, or if symptoms worsen a doctor should be consulted.

Not suitable for children under 12 years of age.

NSAIDs should be used with particular caution in elderly patients who are more prone to adverse events.

### 4.3 Contraindications

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

Severe renal failure or hepatic failure (see section 4.4).

Severe heart failure (NYHA Class IV).

History of gastrointestinal bleeding or perforation related to previous NSAIDs therapy.

Active, or history of recurrent peptic ulcer/haemorrhage (two or more distinct episodes of proven ulceration or bleeding or other gastrointestinal disorder).

Patients with a history of hypersensitivity reactions (e.g. asthma, bronchospasm, rhinitis, angioedema or urticaria) in response to ibuprofen, aspirin or non-steroidal anti-inflammatory drugs.

Use in children under 12 years of age.

Last trimester of pregnancy (see section 4.6).

#### 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 relieve symptoms

**Elderly:** The elderly have an increased frequency of adverse reactions to NSAIDs especially gastrointestinal bleeding and perforation which may be fatal (see section 4.2).

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

**Other NSAIDs:** The use of Nurofen 200mg Coated Tablets with concomitant NSAIDs including cyclooxygenase-2 selective inhibitors should be avoided.

**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).

**Renal:** Renal impairment as renal function may deteriorate (see section 4.3 and 4.8).

**Hepatic:** Hepatic dysfunction (see section 4.3 and 4.8).

**Impaired female fertility:** There is limited evidence that drugs which inhibit cyclooxygenase/prostaglandin synthesis may cause impairment of female fertility by an effect on ovulation. This is reversible on 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 condition may be exacerbated (see section 4.8 – Undesirable effects).

GI bleeding, ulceration or perforation, which can be fatal, has been reported with all NSAIDs at any time during treatment, with or without any 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. Combination therapy with protective agents (e.g. misoprostol or proton pump inhibitors) should be considered for these patients, and also for patients requiring concomitant low dose aspirin, or other drugs likely to increase gastrointestinal risk (see below and 4.5).

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 anti-platelet agents such as aspirin (see section 4.5).

When GI bleeding or ulceration occurs in patients receiving Nurofen 200mg Coated Tablets, the treatment should be withdrawn.

**Cardiovascular and cerebrovascular affects:** 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 studies suggest that use of ibuprofen, particularly at high doses (2400 mg/day) 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.  $\leq$  1200 mg/day) is associated with an increased risk of arterial thrombotic events.

Patients with uncontrolled hypertension, congestive heart failure (NYHA II-III), established ischaemic heart disease, peripheral arterial disease, and/or cerebrovascular disease should only be treated with ibuprofen after careful consideration and high doses (2400 mg/day) should be avoided.

Careful consideration should also be exercised before initiating long-term treatment of patients with risk factors for cardiovascular events (e.g. hypertension, hyperlipidaemia, diabetes mellitus, smoking), particularly if high doses of ibuprofen (2400 mg/day) are required.

**Severe Skin Reactions:** Serious skin reactions, some of them fatal, including exfoliative dermatitis, Stevens-Johnson syndrome, and toxic epidermal necrolysis, have been reported rarely in association with the use of NSAIDs (see section 4.8). Patients appear to be at highest risk of 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 signs and symptoms of severe skin reactions such as skin rash, mucosal lesions, or any other sign of hypersensitivity.

Masking of symptoms of underlying infections:

Nurofen 200mg Tablets 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 Nurofen 200mg Tablets are administered for fever or pain relieve in relation to infection, monitoring of infection is advised. In non-hospital settings, the patient should consult a doctor if symptoms persist or worsen.

Exceptionally, varicella can be at the origin of serious cutaneous and soft tissue infectious complications. It is advisable to avoid use of ibuprofen in cases of varicella.

Product Specific Warnings:

This medicinal product contains 116.1mg (or 0.34 mmol) of sucrose per dose. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

This medicine contains less than 1 mmol sodium (23mg) per tablet, that is to say it is essentially 'sodium free'. The labelling should state: If symptoms persist for more than 3 days or you experience any other symptoms unrelated to the original condition, discontinue treatment immediately and consult your doctor.

In patients with renal, cardiac or hepatic impairment, caution is required since the use of NSAIDs may result in deterioration of renal function.

Elderly patients are at increased risk of the consequences of adverse events. Prolonged use of NSAIDs in the elderly is not recommended.

As NSAIDs can interfere with platelet function, they should be used with caution in patients with intracranial haemorrhage and bleeding diathesis.

If you are pregnant, elderly or have asthma or are receiving regular medical treatment please consult your doctor before taking this medication.

If you have been told by your doctor that you have an intolerance to some sugars, contact your doctor before taking this medicinal product.

Prolonged use of any type of painkiller for headaches can make them worse. If this situation is experienced or suspected, medical advice should be obtained and treatment should be discontinued. The diagnosis of "Medication Overuse Headache" should be suspected in patients who have frequent or daily headaches despite (or because of) the regular use of headache medications.

There is a risk of renal impairment in dehydrated adolescents.

#### 4.5 Interaction with other medicinal products and other forms of interactions

##### **Ibuprofen should be avoided in combination with:**

**Acetylsalicylic acid** Concomitant administration of ibuprofen and acetylsalicylic acid is not generally recommended because of the potential of increased adverse effects.

Experimental data suggest that ibuprofen may competitively inhibit the effect of low dose acetylsalicylic acid on platelet aggregation when they are dosed concomitantly. Although there are uncertainties regarding extrapolation of these data to the clinical situation, the possibility that regular long-term use of ibuprofen may reduce the cardioprotective effect of low-dose acetylsalicylic acid cannot be excluded. 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:**

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

**Anti-coagulants:** NSAIDs may enhance the effects of anticoagulants, such as warfarin (see section 4.4).

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

**Anti-hypertensive (ACE inhibitors and Angiotensin II Antagonists):** reduced anti-hypertensive effect. In some patients with compromised renal function (e.g. dehydrated patients or elderly patients with compromised renal function) the co-administration of an ACE inhibitor or Angiotensin II antagonist and agents that inhibit cyclo-oxygenase may result in further deterioration of renal function, including possible acute renal failure, which is usually reversible. These interactions should be considered in patients taking a coxib concomitantly with ACE inhibitors or angiotensin II antagonists. Therefore, the combination should be administered with caution, especially in the elderly. Patients should be adequately hydrated and consideration should be given to monitoring of renal function after initiation of concomitant therapy, and periodically thereafter.

**Diuretics:** reduced diuretic effect. Diuretics can increase the risk of nephrotoxicity of NSAIDs.

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

**Lithium:** decreased elimination of lithium.

**Methotrexate:** decreased elimination of methotrexate.

**Cyclosporin:** increased risk of nephrotoxicity with NSAIDs.

**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.

**Aminoglycosides:** reduction in renal function in susceptible individuals decreased elimination of aminoglycoside and increased plasma concentrations.

**Probenecid:** reduction in metabolism and elimination of NSAID and metabolites.

**Oral hypoglycaemic agents:** inhibition of metabolism of sulfonylurea drugs, prolonged half-life and increased hypoglycaemia.

#### 4.6 Fertility, pregnancy and lactation

**Pregnancy:** Inhibition of prostaglandin synthesis may adversely affect the pregnancy and/or the embryo/foetal development. Data from epidemiological studies suggest an increased risk of miscarriage and of cardiac malformation and gastroschisis after 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 and 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:

- cardiopulmonary toxicity (with premature closure of the ductus arteriosus and pulmonary hypertension)
- renal dysfunction, which may progress to renal failure with oligo-hydroamniosis

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 resulting in delayed or prolonged labour.

Consequently, ibuprofen is contraindicated during the third trimester of pregnancy.

**Lactation and breast feeding:** In limited studies, Ibuprofen appears in the breast milk in very low concentration and is unlikely to affect the breast fed infant adversely.

**Fertility:** There is some evidence that medicinal products which inhibit cyclo-oxygenase/prostaglandin synthesis may cause impairment of female fertility by an effect on ovulation. This is reversible on withdrawal for treatment. See section 4.4 regarding female fertility.

#### 4.7 Effects on ability to drive and use machines

No adverse affects known.

#### 4.8 Undesirable effects

The list of the following adverse events relates to those experienced with ibuprofen at OTC doses (maximum 1200mg 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, listed 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 adverse events observed most often are gastrointestinal in nature. Adverse events are mostly dose-dependent, in particular the risk of occurrence of gastrointestinal bleeding which is dependent on the dosage range and duration of treatment.

Clinical studies suggest that use of ibuprofen, particularly at a high dose (2400 mg/day) may be associated with a small increased risk of arterial thrombotic events (for example myocardial infarction or stroke) (see section 4.4).

System Organ Class	Frequency	Adverse Event
<b>Blood and Lymphatic System Disorders</b>	Very Rare	Haematopoietic disorders (anaemia, leucopenia, thrombocytopenia, pancytopenia, agranulocytosis).
		First signs are fever, sore throat, superficial mouth ulcers, flu-like symptoms, severe exhaustion, unexplained bleeding and bruising.
<b>Immune System Disorders</b>		Hypersensitivity reactions consisting of <sup>1</sup> :
	Uncommon	Urticaria and pruritus
	Very Rare	Severe hypersensitivity reactions. Symptoms could be facial, tongue and laryngeal swelling, dyspnoea, tachycardia, hypotension (anaphylaxis, angioedema or severe shock).
	Not Known	Respiratory tract reactivity comprising asthma, aggravated asthma, bronchospasm or dyspnoea.
<b>Nervous System Disorders</b>	Uncommon	Headache
	Very Rare	Aseptic meningitis <sup>2</sup>
<b>Cardiac Disorders</b>	Not Known	Cardiac failure and oedema
<b>Vascular Disorders</b>	Not Known	Hypertension
<b>Gastrointestinal Disorders</b>	Uncommon	Abdominal pain, nausea and dyspepsia
	Rare	Diarrhoea, flatulence, constipation and vomiting
	Very Rare	Peptic ulcers, perforation or gastrointestinal bleeding, melaena, haematemesis, sometimes fatal, particularly in the elderly. Ulcerative stomatitis, gastritis
	Not Known	Exacerbation of colitis and Crohn's disease (section 4.4), gastrointestinal intolerance.
<b>Hepatobiliary Disorders</b>	Very Rare	Liver disorders
<b>Skin and Subcutaneous Tissue Disorders</b>	Uncommon	Various skin rashes
	Very Rare	Severe forms of skin reactions such as bullous reactions including Stevens-Johnson syndrome, erythema multiforme and toxic epidermal necrolysis can occur.
	Not Known	Erythema and maculopapular rash. Drug reaction with eosinophilia and systemic symptoms (DRESS syndrome).

		Acute generalised exanthematous pustulosis (AGEP) Photosensitivity reactions
<b>Renal and Urinary Disorders</b>	Very Rare	Acute renal failure, papillary necrosis especially in long-term use associated with increased serum urea and oedema.
<b>Investigations</b>	Very Rare	Decreased haemoglobin levels
<b>Infections and infestations</b>	Very rare	Exacerbation of infections related inflammation (e.g. development of necrotizing fasciitis), in exceptional cases, severe skin infections and soft-tissue complications may occur during a varicella infection.

### Description of Selected Adverse Reactions

1 Hypersensitivity reactions have been reported following treatment with ibuprofen. These may consist of (a) non-specific allergic reaction and anaphylaxis, (b) respiratory tract activity comprising asthma, aggravated asthma, bronchospasm or dyspnoea, or (c) assorted skin disorders including rashes of various types, pruritus, urticaria, purpura, angioedema and more rarely, exfoliative and bullous dermatoses (including toxic epidermal necrolysis, Stevens-Johnson Syndrome and erythema multiforme).

2 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, mixed connective tissue disease).

#### 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 HPRA Pharmacovigilance, Earlsfort Terrace, IRL- Dublin 2; Tel: +353 1 6764971; Fax: +353 1 6762517. Website: [www.hpra.ie](http://www.hpra.ie); E-mail: [medsafety@hpra.ie](mailto:medsafety@hpra.ie).

### 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 vertigo, drowsiness, occasionally excitation and disorientation or coma. Occasionally patients develop convulsions. In serious poisoning hyperkalaemia and 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, liver damage, hypotension, respiratory depression and cyanosis may occur. Exacerbation of asthma is possible in asthmatics.

**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 or gastric emptying if the patient presents within 1 hour of ingestion of a potentially toxic amount. If ibuprofen has already been absorbed, alkaline substances may be administered to promote the excretion of acid ibuprofen in the urine. If frequent or prolonged, convulsions should be treated with intravenous diazepam or lorazepam. Give bronchodilators for asthma.

## 5 PHARMACOLOGICAL PROPERTIES

### 5.1 Pharmacodynamic properties

ATC code: M01AE01

Ibuprofen is a propionic acid derivative, having analgesic, anti-inflammatory and antipyretic activity. The drug's therapeutic effects as a non-steroidal anti-inflammatory drug are thought to result from inhibitory activity on prostaglandin synthetase. Furthermore, ibuprofen reversibly inhibits platelet aggregation.

Experimental data suggest that ibuprofen may competitively inhibit the effect of low dose acetylsalicylic acid on platelet aggregation when they are dosed concomitantly. Some pharmacodynamic studies show that when single doses of ibuprofen 400mg were taken within 8 h before or within 30 min after immediate release acetylsalicylic acid dosing (81mg), a decreased effect of acetylsalicylic acid on the formation of thromboxane or platelet aggregation occurred. Although there are uncertainties regarding extrapolation of these data to the clinical situation, the possibility that regular, long-term use of ibuprofen may reduce the cardioprotective effect of low-dose acetylsalicylic acid cannot be excluded. No clinically relevant effect is considered to be likely for occasional ibuprofen use (see section 4.5).

## 5.2 Pharmacokinetic properties

Ibuprofen is rapidly absorbed from the gastrointestinal tract following administration, and is rapidly distributed throughout the whole body. Peak serum concentrations occurring 1 to 2 hours after administration. The elimination half-life is approximately 2 hours.

Ibuprofen is metabolised in the liver to two inactive metabolites and these together with unchanged Ibuprofen are excreted by the kidney either as such or as conjugates. Excretion by the kidney is both rapid and complete.

Ibuprofen is extensively bound to plasma proteins.

No significant differences in pharmacokinetic profile are observed in the elderly. In limited studies, ibuprofen appears in the breast milk in very low concentrations.

## 5.3 Preclinical safety data

Not applicable.

# 6 PHARMACEUTICAL PARTICULARS

## 6.1 List of excipients

### Tablet Core

Sodium Citrate  
Croscarmellose Sodium  
Stearic Acid  
Colloidal anhydrous silica  
Sodium Laurilsulphate

### Tablet Coat:

Sucrose  
Talc  
Carmellose Sodium  
Titanium Dioxide  
Acacia spray dried  
Macrogol 6000  
Black Printing Ink  
(iron oxide black (E172), propylene glycol (E1520), shellac)

## 6.2 Incompatibilities

Not applicable

## 6.3 Shelf life

3 years.

## 6.4 Special precautions for storage

This medicinal product does not require any special storage precautions.

## **6.5 Nature and contents of container**

A push through laminate blister tray consisting of opaque, white 250 micron PVC/40 gsm PVdC heat-sealed to 20 micron aluminium foil and containing 4, 6 or 12 tablets. The blister trays are packed into cardboard cartons, containing 4, 6, 10, 12, 14, 18, 20, 22, 24, 30, 36, 40 or 48 tablets.

A push through laminate blister tray consisting of opaque, white 250 micron PVC heat-sealed to 20 micron aluminium foil and containing 4, 6 or 12 tablets.

The blister trays are packed into cardboard cartons, containing 4, 6, 10, 12, 14, 18, 20, 22, 24, 30, 36, 40 or 48 tablets.

An HDPE bottle fitted with an HDPE cap that is internally wadded with expanded polyethylene, containing 12, 14, 18, 20, 22, 24, 30, 36, 40 or 48 tablets.

Not all pack sizes or types may be marketed.

## **6.6 Special precautions for disposal of a used medicinal product or waste materials derived from such medicinal product and other handling of the product**

No special requirements.

## **7 MARKETING AUTHORISATION HOLDER**

Reckitt Benckiser Ireland Ltd  
7 Riverwalk  
Citywest Business Campus  
Dublin 24  
Ireland

## **8 MARKETING AUTHORISATION NUMBER**

PA0979/032/006

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

Date of first authorisation: 17th December 2004

Date of last renewal: 17th December 2009

## **10 DATE OF REVISION OF THE TEXT**

March 2021