Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Arthrimel 500 mg Film-Coated Tablets

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each film-coated tablet contains glucosamine sulfate sodium chloride equivalent to 500 mg glucosamine sulfate.

Excipients:
Each tablet contains 50.6 mg (2.2 mmol) of sodium and 60 mg of lactose monohydrate
For a full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Film-coated tablet.
Oblong, off-white, film-coated tablet.

4 CLINICAL PARTICULARS

4.1 Therapeutic Indications

Arthrimel tablets are indicated for relief of symptoms in mild to moderate osteoarthritis of the knee as diagnosed by a doctor.

4.2 Posology and method of administration

Administration:
Arthrimel tablets should be swallowed whole.
Tablets can be taken with or without food.

Adults and the elderly:
One Arthrimel tablet should be taken 3 times daily.
Or
Three Arthrimel tablets to be taken once daily.

Glucosamine is not indicated for the treatment of acute painful symptoms. Relief of symptoms (especially pain relief) may not be experienced until after several weeks of treatment and in some cases even longer. If no relief of symptoms is experienced after 2-3 months, continued treatment with glucosamine should be reevaluated by your healthcare practitioner.

Patients should seek medical advice if their symptoms deteriorate after commencing treatment with glucosamine.

Additional information on special populations:

Children/adolescents:
Safety and efficacy has not been established in children and adolescents, therefore, Arthrimel tablets should not be used in persons under the age of 18 years.

Elderly
No specific studies have been performed in the elderly, but according to clinical experience dosage adjustment is not required when treating otherwise healthy, elderly patients.

Impaired renal and/or liver function
In patients with impaired renal and/or liver function no dose recommendations can be given, since no studies have been performed.

4.3 Contraindications

Known sensitivity to glucosamine (or any of its derivatives), sulfates or any of the other ingredients in Arthrimel tablets (listed in section 6.1).

Arthrimel tablets must not be used in patients who are allergic to shellfish as the active ingredient is obtained from shellfish.

Arthrimel tablets contain soya lecithin. Persons allergic to soya or peanut should therefore not use this medicinal product.

4.4 Special warnings and precautions for use

Warnings
Arthrimel tablets contain lactose monohydrate, patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.

This medicinal product contains 50.6 mg sodium per dose. The daily sodium intake is 151.7 mg (equivalent to 6.6 mmol). To be taken into consideration by patients on a controlled sodium diet.

The presence of other joint disease, which would require alternative treatment, should be excluded.

In patients with impaired glucose tolerance, monitoring of the blood glucose levels and, where relevant, insulin requirements is recommended before start of treatment and periodically during treatment.
In patients with a known risk factor for cardiovascular disease, monitoring of the blood lipid levels is recommended since hypercholesterolemia has been observed in a few patients treated with glucosamine.

A report on exacerbated asthma symptoms triggered after initiation of glucosamine therapy has been described (symptoms resolved after withdrawal of glucosamine). Asthmatic patients starting on glucosamine should therefore be aware of potential worsening of asthma symptoms.

If unusual signs or symptoms appear, or if any changes in the course of usual symptoms occur, the patient is recommended to consult the physician immediately.

4.5 Interaction with other medicinal products and other forms of interaction

There are limited data on possible drug interactions with glucosamine, but increments in the INR parameter have been reported with oral vitamin K antagonists. Patients treated with oral vitamin K antagonists should therefore be closely monitored at the time of initiation or termination of glucosamine therapy.

Increased effect of coumarin anticoagulants (e.g. warfarin) during concomitant treatment with glucosamine has been reported. Patients treated with coumarin anticoagulants should therefore be monitored closely when initiating or ending glucosamine therapy.

Close monitoring of blood sugar levels is recommended for diabetics on hypoglycaemic agents.

Concurrent treatment with glucosamine may increase the absorption and serum concentrations of tetracyclines, but the clinical relevance of this interaction is probably limited.

Due to limited documentation on potential drug interactions with glucosamine, one should generally be aware of altered response or concentration of concurrently used medical products.

4.6 Fertility, pregnancy and lactation

Pregnancy:
There are inadequate data concerning the use of glucosamine in pregnant women. From animal studies only insufficient data are available. Glucosamine should not be used during pregnancy.

Breast feeding:
There is no data available on the excretion of glucosamine in breastmilk. The use of glucosamine during breast feeding is therefore not recommended as there is no data on the safety of the child.

4.7 Effects on ability to drive and use machines

No studies on the effects on the ability to drive or use machines have been performed. If dizziness or drowsiness is experienced, car driving and the operating of machinery is not recommended.

4.8 Undesirable effects

The most common adverse reactions associated with treatment with glucosamine are nausea, abdominal pain, indigestion, constipation and diarrhoea. In addition, headache, tiredness, rash itching, and flushing have been reported. The reported adverse reactions are usually mild and transitory.

Medra System Organ Class	**Common (≥1/100 to <1/10)**	**Uncommon (≥1/1,000 to <1/100)**	**Rare (≥1/10,000 to <1/1000)**	**Not known (cannot be estimated from the available data)**
Nervous system disorders	Headache Tiredness			Dizziness
Respiratory, thoracic and mediastinal disorders				Asthma / Asthma aggravated
Gastrointestinal disorders	Nausea Abdominal pain Indegestion Diarrhoea Constipation			Vomiting
Skin and subcutaneous tissue disorders		Rash Itching Flushing		Angiodema Urticaria
Metabolism and nutrition disorders				Diabetes mellitus inadequate control Hypercholesterolaemia
General disorders and administration site conditions				Oedema/peripheral oedema

Cases of Hypercholesterolemia, Asthma, aggravated and Diabetes mellitus inadequate control have been reported, but causality has not been established.

Arthrimel tablets may cause Hepatic enzyme elevation and rarely jaundice.

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; E-mail: medsafety@hpra.ie.

4.9 Overdose

Signs and symptoms of accidental or intentional overdose with glucosamine might include headache, dizziness, disorientation, arthralgia, nausea, vomiting, diarrhoea or constipation.

In cases of overdose, treatment with glucosamine should be discontinued and standard supportive measures should be adopted as required.

In clinical trials one of five healthy young subjects experienced headache following infusion of glucosamine up to 30 g. In addition, one case of overdose has been reported in a 12-year old female who took orally 28 g of glucosamine hydrochloride. She developed arthralgia, vomiting and disorientation. The patient fully recovered.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other anti-inflammatory and anti-rheumatic agents, non-steroidal anti-inflammatory drugs. ATC code: M01AX05

Glucosamine is an endogenous substance, a normal constituent of the polysaccharide chains of cartilage matrix and synovial fluid glucosaminoglycans. In vitro and in vivo studies have shown glucosamine stimulates the synthesis of physiological glycosaminoglycans and proteoglycans by chondrocytes and of hyaluronic acid by synoviocytes. The mechanism of action of glucosamine in humans is unknown. The period to onset of response cannot be assessed.

5.2 Pharmacokinetic properties

Glucosamine is a relatively small molecule (molecular mass 179), which is easily dissolved in water and soluble in hydrophilic organic solvents. The available information on the pharmacokinetics of glucosamine is limited. The absolute bioavailability is unknown. The distribution volume is approximately 5 litres and the half-life after intravenous administration is approximately 2 hours. Approximately 38% of an intravenous dose is excreted in the urine as unchanged substance.

5.3 Preclinical safety data

D-glucosamine has low acute toxicity. Animal experimental data relating to toxicity during repeated administration, reproduction toxicity, mutagenicity and carcinogenicity is lacking for glucosamine.

Results from in vitro studies and in vivo studies in animals have shown that glucosamine reduces insulin secretion and induces insulin resistance, probably via glucokinase inhibition in the beta cells. The clinical relevance is unknown.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Microcrystalline cellulose
Lactose monohydrate
Pregelantinised maize starch

Crospovidone
Stearic Acid
Titanium dioxide [E171]
Yellow iron dioxide [E172]
Hypromellose [E464]
Macrogol 400

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

2 years.

6.4 Special precautions for storage

Do not store above 25ºC. Store in the original package in order to protect from moisture.

6.5 Nature and contents of container

Cartons containing PVdC coated PVC/A1 blister strips, or HDPE containers fitted with a tamper-evident HDPE screw cap.

Pack Size: 9, 15, 21, 30, 84, 90, 168, 180, 252, 270, 504, or 540 tablets.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal and other handling

No special requirements.

7 MARKETING AUTHORISATION HOLDER

Phoenix Labs
Suite 12
Bunkilla Plaza
Bracetown
Business Park
Clonee
Co. Meath
Ireland

8 MARKETING AUTHORISATION NUMBER

PA1113/011/001

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 22 July 2005

Date of last renewal: 22 July 2010

10 DATE OF REVISION OF THE TEXT

June 2018