

# Summary of Product Characteristics

## 1 NAME OF THE MEDICINAL PRODUCT

Arthriaid 500mg Film-Coated Tablets

## 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each film-coated tablet contains 628mg glucosamine sulfate sodium chloride equivalent to 500 mg glucosamine sulfate or 393mg glucosamine.

Excipients:

Each tablet contains 50.6 mg (2.2 mmol) of sodium.

Lactose monohydrate 60.0 mg

Lecithin soya (E322)

For a full list of excipients, see section 6.1.

## 3 PHARMACEUTICAL FORM

Film-coated tablet.

Off-white oblong shaped film-coated tablet, 9x20mm.

## 4 CLINICAL PARTICULARS

### 4.1 Therapeutic Indications

Arthriaid tablets are indicated for relief of symptoms in mild to moderate osteoarthritis of the knee.

### 4.2 Posology and method of administration

*Administration:*

Arthriaid tablets should be swallowed whole.

Tablets can be taken with or without food.

*Adults and the elderly:*

One Arthriaid tablet should be taken 3 times daily.

Or

Three Arthriaid 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.

Additional information on special populations:

*Children/adolescents:*

Safety and efficacy has not been established in children and adolescents, therefore, Arthriaid 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 Arthriaid tablets (listed in section 6.1).

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

**Arthriaid tablets** contains soya lecithin. *Persons* allergic to soya or peanut, should therefore not use this medicinal product.

### **4.4 Special warnings and precautions for use**

#### **Warnings**

Arthriaid 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.

### **4.5 Interaction with other medicinal products and other forms of interaction**

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.

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

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

Arthriaid tablets may cause Hepatic enzyme elevation and rarely jaundice.

**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 glucosamin 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

Tablet:

Microcrystalline cellulose 101

Microcrystalline cellulose 102

Lactose monohydrate

Pregelatinised maize starch

Crospovidone

Stearic acid

Coating:

Titanium dioxide (E171)

Yellow iron oxide (E172)

Hypromellose (E464)

Macrogol 400

### 6.2 Incompatibilities

Not applicable.

### **6.3 Shelf life**

3 years.

After first opening of the tablet container the medicinal product should be used within 6 months.

### **6.4 Special precautions for storage**

This product does not require any special temperature storage conditions.

Store in the original package in order to protect from moisture

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

Cartons containing PVdC coated PVC/Al blisters,

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

Or

Cartons containing 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 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**

FMC Pharma Ltd.

Unit 622, Northern Extension

Co. Waterford

Ireland

## **8 MARKETING AUTHORISATION NUMBER**

PA 1521/1/1

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

Date of first authorisation: 22<sup>nd</sup> July 2011

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

September 2012