

# Summary of Product Characteristics

## 1 NAME OF THE MEDICINAL PRODUCT

Salazopyrin® 500 mg Suppositories

## 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each suppository contains 500 mg of sulphasalazine.

For a full list of excipients, see section 6.1.

## 3 PHARMACEUTICAL FORM

Suppository

The suppositories are odourless, orange/yellow in colour and torpedo-shaped.

## 4 CLINICAL PARTICULARS

### 4.1 Therapeutic Indications

Induction and maintenance of remission of ulcerative colitis; treatment of active Crohn's disease.

Treatment of rheumatoid arthritis which has failed to respond to non-steroidal anti-inflammatory drugs (NSAIDs).

### 4.2 Posology and method of administration

The dosage is adjusted according to the severity of the disease and the patient's tolerance to the drug, as detailed below.

#### **Elderly Patients:**

No special precautions are necessary.

#### **A) Ulcerative Colitis, Crohn's Disease**

##### **Adults:**

*Severe attack:* 2-4 tablets, four times a day, may be given in conjunction with steroids as part of an intensive management regime. Rapid passage of the tablet may reduce the effect of the drug.

Night-time interval between doses should not exceed eight hours.

*Moderate attack:* 2-4 tablets, four times a day may be given in conjunction with steroids.

*Maintenance Therapy:* With induction of remission, reduce the dose gradually to 4 tablets per day. This dosage should be continued indefinitely, since discontinuance even several years after an acute attack is associated with four-fold increase in risk of relapse.

#### **Paediatric population:**

The dose is reduced in proportion to body weight.

*Acute attack or relapse:*

40-60 mg/kg/per day.

*Maintenance Dosage:*

20-30 mg/kg per day.

In severe disease of the rectum or sigmoid, oral and rectal routes of therapy may be used simultaneously.

### **Rheumatoid Arthritis**

#### **Adults:**

The usual initial dose is 0.5 g daily being increased weekly by 0.5 g to a control level not exceeding 3 g/day.

## **4.3 Contraindications**

Use in infants under the age of two years.

Use in patients where there is a known hypersensitivity to sulfasalazine, its metabolites or any excipients as well as sulfonamides or salicylates.

Use in patients with jaundice or porphyria.

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

Serious infections associated with myelosuppression, including sepsis and pneumonia, have been reported. Patients who develop a new infection while undergoing treatment with sulfasalazine should be monitored closely. Administration of sulfasalazine should be discontinued if a patient develops a serious infection. Caution should be exercised when considering the use of sulfasalazine in patients with a history of recurring or chronic infections or with underlying conditions which may predispose patients to infections.

Complete blood counts (including differential white cell, red cell and platelet counts) liver function tests and assessment of renal function (including urinalysis) should be performed in all patients initially and at least monthly for the first three months of treatment. Thereafter, monitoring should be performed as clinically indicated. The patient should also be counseled to report immediately with any sore throat, fever, malaise, pallor, purpura, jaundice or unexpected non-specific illness during sulfasalazine treatment may indicate myelosuppression, haemolysis, or hepatotoxicity. Treatment should be stopped while awaiting the results of blood tests.

Sulfasalazine should not be given to patients with impaired hepatic or renal function or with blood dyscrasias, unless the potential benefit outweighs the risk.

Sulfasalazine should be given with caution to patients with severe allergy or bronchial asthma.

Severe hypersensitivity reactions may include internal organ involvement, such as hepatitis, nephritis, myocarditis, mononucleosis-like syndrome (i.e., pseudomononucleosis), hematological abnormalities (including hematophagic histiocytosis), and/or pneumonitis including eosinophilic infiltration.

Use in children with systemic onset juvenile rheumatoid arthritis may result in a serum sickness-like reaction; therefore, sulfasalazine is not recommended in these patients.

Oral sulfasalazine inhibits the absorption and metabolism of folic acid and may cause folic acid deficiency (see section 4.6), potentially resulting in serious blood disorders (e.g., macrocytosis and pancytopenia). This can be normalised by administration of folic acid or folinic acid (leucovorin).

### **Drug Rash with Eosinophilia and Systemic Symptoms (DRESS)**

Severe, life-threatening, systemic hypersensitivity reactions such as Drug rash with eosinophilia and systemic symptoms (DRESS) have been reported in patients taking various drugs including sulfasalazine. It is important to note that early manifestations of hypersensitivity, such as fever or lymphadenopathy, may be present even though rash is not evident. If such signs or symptoms are present, the patient should be evaluated immediately. Sulfasalazine should be discontinued if an alternative etiology for the signs or symptoms cannot be established.

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 sulfasalazine. Patients appear to be at highest risk for these events early in the course of therapy, the onset of the event occurring in the majority of cases within the first month of treatment. Sulfasalazine should be discontinued at the first appearance of skin rash, mucosal lesions, or any other sign of hypersensitivity.

Since sulfasalazine may cause haemolytic anaemia, it should be used with caution in patients with G-6-PD deficiency.

Because sulfasalazine causes crystalluria and kidney stone formation, adequate fluid intake should be ensured during administration.

Oligospermia and infertility may occur in men treated with sulfasalazine. Discontinuation of the drug appears to reverse these effects within 2 to 3 months.

Certain types of extended wear soft contact lenses may be permanently stained during therapy.

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

Use of sulfonamides with folic-acid antagonists or hypoglycaemics may increase the effects of these agents.

Reduced absorption of digoxin, resulting in non-therapeutic serum levels, has been reported when used concomitantly with oral sulfasalazine.

Due to inhibition of thiopurine methyltransferase (TPMT) by sulfasalazine, bone marrow suppression and leukopenia have been reported when thiopurine 6-mercaptopurine or its prodrug, azathioprine, and oral sulfasalazine were used concomitantly.

Coadministration of oral sulfasalazine and methotrexate to rheumatoid arthritis patients did not alter the pharmacokinetic disposition of the drugs. However, an increased incidence of gastrointestinal adverse events, especially nausea, was reported.

Several reports of possible interference with measurements, by liquid chromatography, of urinary normetanephrine causing a false-positive test result have been observed in patients exposed to sulfasalazine or its metabolite, mesalamine/mesalazine.

#### **4.6 Fertility, pregnancy and lactation**

##### Pregnancy

Reproduction studies in rats and rabbits have revealed no evidence of harm to the foetus. Oral sulfasalazine inhibits the absorption and metabolism of folic acid and may cause folic acid deficiency (see section 4.4 Special warnings and precautions for use). There have been reports of babies with neural tube defects born to mothers who were exposed to sulfasalazine during pregnancy, although the role of sulfasalazine in these defects has not been established. Because the possibility of harm cannot be completely ruled out, sulfasalazine should be used during pregnancy only if clearly needed.

##### Breast-feeding

Sulfasalazine and sulfapyridine are found in low levels in breast milk. Caution should be used, particularly if breastfeeding premature infants or those deficient in G-6-PD. There have been reports of bloody stools or diarrhoea in infants who were breastfeeding from mothers on sulfasalazine. In cases where the outcome was reported, bloody stools or diarrhoea resolved in the infant after discontinuation of sulfasalazine in the mother.

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

The effect of sulfasalazine on the ability to drive and use machinery has not been systematically evaluated.

## 4.8 Undesirable effects

The following events have been reported in patients receiving sulfasalazine:

MedDRA System Organ Class	Frequency	Adverse Drug Reaction
Infections and infestations	Not known	aseptic meningitis, pseudomembranous colitis, parotitis
Blood and lymphatic system disorders	Common	leukopenia
	Uncommon	thrombocytopenia <sup>†</sup>
	Not known	pancytopenia, agranulocytosis, aplastic anaemia, pseudomononucleosis* <sup>†</sup> , haemolytic anaemia, macrocytosis, megaloblastic anaemia, Heinz body anaemia, hypoprothrombinaemia, lymphadenopathy, methaemoglobinaemia, neutropenia, pancytopenia
Immune system disorders	Not known	anaphylaxis*, serum sickness, polyarteritis nodosa
Metabolism and nutrition system disorders	Common	loss of appetite
	Not known	folate deficiency* <sup>†</sup>
Psychiatric disorders	Uncommon	depression, hallucinations, insomnia
Nervous system disorders	Common	dizziness, headache, taste disorders
	Not known	encephalopathy, peripheral neuropathy, smell disorders, ataxia, convulsions
Ear and labyrinth disorders	Common	tinnitus
	Not known	vertigo
Eye disorders	Not known	conjunctival and scleral infection
Cardiac disorders	Not known	allergic myocarditis* <sup>†</sup> , pericarditis, cyanosis
Vascular disorders	Not known	pallor* <sup>†</sup> , vasculitis
Congenital, familial and genetic disorders	Not known	Acute attack may be precipitated in patients with porphyria
Respiratory, thoracic and mediastinal disorders	Common	cough
	Uncommon	dyspnoea
	Not known	interstitial lung disease* , eosinophilic infiltration, fibrosing alveolitis, oropharyngeal pain* <sup>†</sup>
Gastrointestinal disorders	Very common	gastric distress, nausea
	Common	abdominal pain, diarrhoea*, vomiting*
	Not known	aggravation of ulcerative colitis* , pancreatitis, stomatitis
Hepatobiliary disorders	Uncommon	jaundice* <sup>†</sup>
	Not known	hepatic failure*, hepatitis fulminant*, hepatitis <sup>†</sup> , hepatitis cholestatic*, cholestasis*
Skin and subcutaneous tissue disorders	Common	purpura* <sup>†</sup> , pruritus
	Uncommon	alopecia, urticaria
	Very rare	toxic epidermal necrolysis
	Not known	drug rash with eosinophilia and systemic symptoms (DRESS)* <sup>†</sup> , epidermal necrolysis (Lyell's syndrome) <sup>†</sup> , Stevens-Johnson syndrome <sup>†</sup> , exanthema, exfoliative dermatitis <sup>†</sup> , angioedema*,

		toxic pustuloderma, lichen planus, photosensitivity, erythema, periorbital oedema
Musculoskeletal and connective tissue disorders	Common	arthralgia
	Not known	system lupus erythematosus, Sjogren's syndrome
Renal and urinary disorders	Common	proteinuria
	Not known	nephrotic syndrome, interstitial nephritis, nephrolithiasis*, haematuria, crystalluria <sup>†</sup>
Reproductive system and breast disorders	Not known	reversible oligospermia <sup>†</sup>
General disorders and administration site conditions	Common	fever <sup>†</sup>
	Uncommon	facial oedema
	Not known	yellow discoloration of skin and body fluids*, drug fever, generalised skin eruptions
Investigations	Uncommon	elevation of liver enzymes
	Not known	induction of autoantibodies
Frequency categories: Very common ≥1/10; Common ≥1/100 to <1/10; Uncommon ≥1/1000 to <1/100; Rare ≥1/10000 to <1/1000; Very rare <1/10000; Not known (cannot be estimated from available data) * ADR identified post-marketing <sup>†</sup> see section 4.4 Special warnings and precautions for use		

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. You can also report side effects directly (see details below). By reporting side effects you can help provide more information on the safety of this medicine. Reports may be made by following the links to the online reporting option accessible from the IMB homepage, or by completing the downloadable report form also accessible from the IMB website, which may be completed manually and submitted to the IMB via freepost, to the following address:

FREEPOST  
Pharmacovigilance Section  
Irish Medicines Board  
Kevin O'Malley House  
Earlsfort Centre  
Earlsfort Terrace  
IRL - Dublin 2  
Tel: +353 1 6764971  
Fax: +353 1 6762517  
Website: [www.imb.ie](http://www.imb.ie)  
e-mail: [imbpharmacovigilance@imb.ie](mailto:imbpharmacovigilance@imb.ie)

4.9 Overdose

The most common symptoms of overdose, similar to other sulfonamides, are nausea and vomiting. Patients with impaired renal function are at increased risk of serious toxicity. Treatment is symptomatic and should be supportive, including alkalinisation of urine. Patients should be observed for development of methemoglobinemia or sulfahemoglobinemia. If these occur treat appropriately.

## 5 PHARMACOLOGICAL PROPERTIES

### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Aminosalicyclic acid and similar agents

ATC code: A07E C01

Sulfasalazine is split by bacteria in the colon into sulphapyridine and mesalazine. All three compounds have pharmacological effects, principally immunomodulatory, antibacterial and alteration of the arachidonic acid cascade and the activity of certain enzymes.

### 5.2 Pharmacokinetic properties

Around 90% of a sulfasalazine (SU) dose reaches the colon where bacteria split the drug into sulphapyridine (SP) and mesalazine (ME). Most SP is absorbed, either hydroxylated or glucuronidated, and a mix of unchanged and metabolised SP appears in the urine. Some ME is taken up and acetylated in the colon wall, such that renal excretion is mainly acetylated ME (Ac-ME). SU is excreted in the bile and urine.

Studies with Salazopyrin EN-Tabs show no statistically significant differences in the main parameters compared with an equivalent dose of SU powder, and the data below relate to ordinary tablets. In respect of the use of Salazopyrin in bowel disease, there is no evidence that systemic levels are of any special clinical relevance other than with regard to ADR incidence. Here, levels of SP over about 50 µg/mL are associated with a substantial risk of ADRs, especially in slow acetylators. For SU given as a single 3 g oral dose: peak plasma levels of SU occurred in 3-5 hours, elimination half-life was  $5.7 \pm 0.7$  hours and lag time was 1.5 hours. During maintenance therapy, renal clearance was:  $7.2 \pm 1.7$  mL/min. for SU,  $9.9 \pm 1.9$  mL/min. for SP and  $100 \pm 20$  mL/min. for Ac-ME. Free SP first appears in plasma 4.3 hours after a single oral dose with an absorption half-life of 2.7 hours. The elimination half-life was calculated as 18 hours. As regards mesalazine, in urine only Ac-ME (not free ME) was demonstrable, the acetylation probably largely achieved in the colon mucosa.

After a 3 g dose of SU the dose lag-time was  $6.1 \pm 2.3$  hours and plasma levels were below 2 µg/ml total ME. Urinary excretion half-life was  $6.0 \pm 3.1$  hours and absorption half-life, based on these figures was  $3.0 \pm 1.5$  hours. The renal clearance constant was 125 mL/min. corresponding to the GFR.

As regards rheumatoid arthritis, there are no data that suggest any differences to the above.

### 5.3 Preclinical safety data

There are no pre-clinical data of relevance to the prescriber which are additional to those already included in other sections of the SPC.

## 6 PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

Povidone  
Hard Fat

### 6.2 Incompatibilities

Not applicable.

### 6.3 Shelf life

Five years.

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

Do not store above 25°C.

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

Polyethylene/PVC laminate strips of ten suppositories; cartons of one or five strips.

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**

Minimise handling to ensure suppositories remain firm enough to insert in the rectum.

### **7 MARKETING AUTHORISATION HOLDER**

Pharmacia Laboratories Limited  
Ramsgate Road  
Sandwich  
Kent CT13 9NJ  
United Kingdom

### **8 MARKETING AUTHORISATION NUMBER**

PA0187/051/002

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

Date of first authorisation: 1 April 1977

Date of last renewal: 1 April 2007

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

March 2014