Summary of Product Characteristics

1. NAME OF THE MEDICINAL PRODUCT

Olfen™ 1% Gel

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 g gel contains diclofenac sodium 10 mg as active substance.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Gel.

Opalescent to light turbid, colourless to light yellowish gel with an odour of Isopropanol.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

For the external treatment of pain, inflammation and swelling in:

- injuries of the tendons, ligaments, muscles and joints, e.g. sprains, contusions, strains and back pain following sport or accidents;
- localised forms of soft tissue rheumatism, such as tendinitis (tennis elbow), shoulder-hand syndrome, bursitis, periarthropathies;
- and for the symptomatic treatment of osteoarthritis of small and medium-sized joints close to the skin surface, such as finger joints or knees.

4.2 Posology and method of administration

The product is intended for external use only.

Adults and adolescents aged 14 years and over

Apply thin layers of Diclofenac 1% Gel in the affected area, 3-4 times daily according to the need of the situation (about 2-4 g, quantity as big as a cherry or a walnut) and rub gently.

The treatment duration depends on the indications and the patient's response to the treatment. It is recommended that the treatment should be evaluated 7 days after its beginning.

In adolescents aged 14 years and over, if this product is required for more than 7 days for pain relief or if the symptoms worsen the patients/parents of the adolescent is/are advised to consult a doctor.

Diclofenac 1% Gel can be used as an additional treatment to the oral administration of non-steroidal anti-inflammatory drugs.

Children and adolescents aged below 14 years

There are insufficient data on efficacy and safety available for the children and adolescents below 14 years of age (see also section 4.3).

Hepatic and renal impairment

No dosage adjustment is required in patients with hepatic impairment.

Diclofenac 1% Gel is contraindicated in patients with renal impairment.

Elderly

The usual adult dosage may be used.

Method of administration

Cutaneous use.

Apply on healthy skin only.

After application, the hands should be washed, unless these are being treated.

Diclofenac 1% Gel can be used as additional treatment to the oral administration of non-steroidal anti-inflammatory drugs.

4.3 Contraindications

Hypersensitivity to diclofenac or to any of the excipients (e.g. isopropanol or E223 sodium disulphite). In patients in whom acetylsalicylic acid or other non-steroidal anti-inflammatory drugs such as ibuprofen can trigger asthma attacks, angioedema, urticaria or acute rhinitis.

During the 3rd trimester of pregnancy (see advice in the section “Pregnancy, lactation”). Patients with renal impairment.

The use in children and adolescents aged less than 14 years is contraindicated

4.4 Special warnings and precautions for use

The occurrence of systemic undesirable effects with the topical use of diclofenac is low when compared with the frequency of undesirable effects with the oral use of diclofenac.

The possibility of systemic adverse events from the application of topical diclofenac cannot be excluded if the preparation is used on large areas of skin and over a prolonged period (see the product information on systemic forms of diclofenac).

Cutaneous safety of NSAIDs: Serious skin reactions, some of them fatal, have been reported very rarely, including exfoliative dermatitis, Stevens-Johnson syndrome and toxic epidermal necrolysis, associated with the administration of NSAIDs (see section 4.8.). Apparently, the risk of occurrence of these reactions is higher at the beginning of the treatment and in most cases, these reactions are manifested during the first month of treatment. Concomitant use of oral NSAIDs should be cautioned as the incidence of untoward effects, particularly systemic side effects, may increase.

Diclofenac 1% Gel should be discontinued at the first signs of rash, mucosal injuries or other hypersensitivity manifestations.

Topical diclofenac should be applied only to intact non-diseased skin, and not to skin wounds or open injuries. It should not be allowed to come into contact with the eyes or mucous membranes and should not be ingested.

The area treated with Diclofenac 1% Gel should not be exposed to sunlight.

Topical diclofenac can be used with non-occlusive bandages but should not be used with an airtight occlusive dressing.

4.5 Interaction with other medicinal products and other forms of interaction

Diuretics, Angiotensin Converting Enzyme Inhibitors (ACE inhibitors) and Angiotensin II Antagonists (AAII): NSAIDs may decrease the effectiveness of diuretics and other antihypertensive medicinal products. In some patients with impaired renal function (e.g., dehydrated patients or elderly with impaired renal function) the co-administration of an ACEI or AIIA and cyclooxygenase inhibitor agents may result in the progression of renal function deterioration, including the possibility of acute renal insufficiency, which is usually reversible. The occurrence of these interactions should be considered in patients applying diclofenac, particularly if in large areas of the skin and for prolonged periods, in combination with ACEI or AIIA. Consequently, this drug combination should be used with caution, especially in elderly patients. Patients should be properly hydrated and the need to monitor the renal function after the beginning of the concomitant therapy and periodically thereafter should be analysed.

Since systemic absorption of diclofenac from a topical application is very low such interactions are very unlikely.

4.6 Fertility, pregnancy and lactation

Pregnancy

The systemic concentration of diclofenac is lower after topical administration, compared to oral formulations. With reference to experience from treatment with NSAIDs with systemic uptake, the following is recommended:

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, diclofenac should not be given unless clearly necessary. If diclofenac 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:

o cardiopulmonary toxicity (with premature closure of the ductus arteriosus and pulmonary hypertension);

o renal dysfunction, which may progress to renal failure with oligo-hydroamniosis;

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

o possible prolongation of bleeding time, an anti-aggregating effect which may occur even at very low doses.

o inhibition of uterine contractions resulting in delayed or prolonged labour.

Consequently, diclofenac is contraindicated during the third trimester of pregnancy (see section 4.3).

Lactation

Like other NSAIDs, diclofenac passes into breast milk in small amounts. However, at therapeutic doses of topical diclofenac, no effects on the suckling child are anticipated. Because of a lack of controlled studies in lactating women, the product should only be used during lactation under advice from a healthcare professional. Under this circumstance, this medicinal product should not be applied on the breasts of nursing mothers, nor elsewhere on large areas of skin or for a prolonged period of time (see section 4.4).

4.7 Effects on ability to drive and use machines Not applicable.

4.8 Undesirable effects

Undesirable effects are listed according to system organ class and frequency. Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness.

Frequencies

“Very common” (≥1/10), “common” (≥1/100, <1/10), “uncommon” (≥1/1000, <1/100), “rare” (≥1/10,000, <1/1000), “very rare” (<1/10,000).

Immune system disorders

Very rare: angioedema, hypersensitivity reactions (including urticaria), angio-oedema.

Respiratory, thoracic and mediastinal disorders

Very rare: asthma.

Skin and subcutaneous tissue disorders

Common: skin rash, eczema, reddening, dermatitis (including contact dermatitis), pruritus.

Rare: bullous dermatitis

Very rare: photosensitisation, pustular skin rash.

The likelihood of systemic side effects occurring during topical administration of diclofenac is low compared with the frequency of side effects during oral treatment with diclofenac.

When Olfen™ 1% Gel is used on relatively large areas and for a prolonged period of time, the occurrence of systemic side effects cannot entirely be ruled out. In such cases, the professional information should be consulted for the oral forms of Olfen™.

"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 TMDA ADR reporting tool; website: https://imis.tmda.go.tz/arrt or search for TMDA Adverse Reactions Reporting Tool in the Google Play Store'';

4.9 Overdose

Signs and symptoms

Due to the low systemic absorption of diclofenac when used topically, an overdose is very unlikely. Adverse effects similar to those of an overdose with diclofenac tablets are to be expected following inadvertent ingestion of Olfen™ 1% Gel (1 tube of 100 g is equivalent to 1 g diclofenac sodium).

Treatment

Should significant systemic side effects occur as a result of improper use or accidental overdose (e.g. in children), the general therapeutic measures customary for treating intoxication with non-steroidal anti-inflammatory agents must be taken.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

ATC code

ATC code: M02AA15

Mechanism of action

Diclofenac is a non-steroidal antic-inflammatory drug (NSAID) with marked analgesic, anti-inflammatory and antipyretic properties.

Olfen™ 1% Gel is an anti-inflammatory and analgesic preparation for external use.

The colourless, non-greasy gel can be rubbed into skin easily and possesses a soothing, cooling effect due to the aqueous alcoholic base. The demonstrated inhibition of prostaglandin biosynthesis by diclofenac is regarded as an important component of its mechanism of action. In cases of inflammation of traumatic origin, Olfen™ 1% Gel provides relief from pain and causes regression of oedema.

Pharmacodynamics Not applicable. *Clinical efficacy* Not applicable.

5.2 Pharmacokinetic properties

Absorption

The amount of diclofenac absorbed through the skin is proportional to the duration of skin contact and to the area of skin covered with diclofenac gel and is dependent on the total topical dose and the hydration of the skin. After topical application of 2.5 g diclofenac gel per 500 cm² of skin, about 6% of the diclofenac dose is absorbed, as determined by total elimination via the kidney compared with diclofenac tablets. The absorption of diclofenac is increased three-fold by an occlusive bandage for 10 hours.

Distribution

Following topical administration of Olfen™ 1% Gel to hand and knee joints, diclofenac is detectable in plasma, synovial tissue and synovial fluid.

Peak plasma concentrations of diclofenac are about 100 times lower after topical application of Olfen™ 1% Gel than after oral administration of Olfen™ tablets. Diclofenac is 99.7% bound to serum proteins, primarily albumin (99.4%).

Metabolism

Biotransformation of diclofenac is partly by glucuronidation of the intact molecule, but mainly by single and multiple hydroxylation followed by glucuronidation of most of the resultant phenolic metabolites. Two of these phenolic metabolites are biologically active, although to a much lesser extent than diclofenac.

Elimination

Total systemic clearance of diclofenac from plasma is 263 ± 56 mL/min (mean ± standard deviation) and the terminal plasma half-life is 1-2 h. Four of the metabolites, including the two active metabolites, also have a short plasma half-life of 1-3 h. One metabolite, 3'-hydroxy-4'-methoxydiclofenac, has a much longer half-life. However, this metabolite is practically inactive. Diclofenac and its metabolites are predominantly eliminated with the urine.

Kinetics in special patient groups Hepatic impairment

The kinetics and metabolism of diclofenac in patients with chronic hepatitis or compensated liver cirrhosis are the same as in patients without liver disease.

Renal impairment

No accumulation of diclofenac and its metabolites is to be expected in patients with renal failure.

5.3 Preclinical safety data

Long-term toxicity (or repeat dose toxicity)

Preclinical data from acute and repeated dose toxicity, genotoxicity, mutagenicity and carcinogenicity studies with diclofenac indicated no specific hazard for humans at the recommended therapeutic dosages.

Mutagenicity

No teratogenic effects were found in mice, rats or rabbits.

Reproductive toxicity

Diclofenac has no effect on the fertility of the parent animals (rat) or prenatal, perinatal and postnatal development of the progeny. *Phototoxicity*

There was no evidence in various studies that diclofenac gel causes phototoxicity or skin sensitisation.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Lactic acid, diisopropyl adipate, isopropyl alcohol, sodium metabisulfite (E223), hydroxyethyl cellulose, hydroxypropyl cellulose, purified water.

6.2 Incompatibilities

Not applicable.

6.3. Shelf life

Do not swallow.

Do not use this medicine after the expiry date ("EXP") stated on the container.

Shelf life 36 months.

6.4 Special precautions for storage

Climatic zone I and II: Do not store above 25° C.

Climatic zone III and IV: Do not store above 30° C.

Store in the original packaging.
Keep out of the sight and reach of children.

6.5. Nature and contents of container Olfen™ 1% Gel: Aluminium tube of 20 g, 50 g and 100 g. (D) Not all pack sizes may be marketed.

6.6 Special precautions for disposal No special requirements.

7. Marketing Authorization Holder and Manufacturing site addresses

Acino Pharma AG,

Birsweg 2, 4253 Liesberg,

Switzerland.

8. Marketing authorization number(s)

TAN 21 HM 0306

9. Date first authorization/renewal of the authorization

2021-08-20

10. Date of revision of the text