Summary of Product Characteristics

1. NAME OF THE MEDICINAL PRODUCT:

PYL-X Ointment

2. QUALITATIVE AND QUANTITATIVE COMPOSITION:

Composition:

Lidocaine USP...... 3.00 %W/W

Zinc Oxide USP..... 5.00 %W/W

Allantoin BP...... 0.5%W/W

Hydrocortisone Acetate BP... 0.25%W/W

Excipients.....QS

For a full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM: TOPICAL CREAM

A white to off-white Ointment

4. CLINICAL PARTICULARS:

4.1 Therapeutic indications:

PYL-X Ointment is indicated in managing inflammatory conditions of anorectal region e.g.

- 1. Bleeding or non-bleeding haemorrhoids
- 2. Internal or external haemorrhoids
- 3. Anal fissure
- 4. Proctitis
- 5. Post haemorrihoidectomy pain and discomfort.

4.2 Posology and method of administration

Apply **PYL-X OINTMENT** twice or thrice a day before or after defecation or as directed by physician. For topical administration.

4.3 Contraindications

PYL-X OINTMENT is contraindicated in patients with allergy or hypersensitivity to hydrocortisone, lidocaine, allantoin, zinc oxide or to any of the ingredients of the product and in the presence of viral or bacterial infections unless an alternative treatment is given

4.4 Special warnings and precautions for use

Before using hydrocortisone, tell your doctor or pharmacist if you are allergic to it; or to other corticosteroids (such as prednisone); or if you have any other allergies. This product may contain inactive ingredients, which can cause allergic reactions or other problems. Talk to your pharmacist for more details. Before using this medication, tell your doctor or pharmacist your medical history, especially of: other stomach/intestinal problems (such as ulcers, blockage, bleeding, infection, recent surgery), infections (such as tuberculosis, fungal infections), certain eye conditions (cataracts, glaucoma, herpes infection of the eye), heart problems (such as congestive heart failure, recent heart attack), high blood pressure, liver disease, kidney disease, thyroid problems (overactive or underactive thyroid disease), diabetes, bone loss (osteoporosis), bleeding or blood clotting problems, mental/mood conditions (such as psychosis, depression), low potassium blood level. Limit alcoholic

beverages while using this medication to decrease the risk of stomach/intestinal bleeding. Rarely, using corticosteroid medications for a long time can make it more difficult for your body to respond to physical stress. Therefore, before having surgery or emergency treatment, or if you get a serious illness/injury, tell your doctor or dentist that you are using this medication or have used this medication within the past few months. Do not have immunizations, vaccinations, or skin tests without the consent of your doctor. Avoid contact with people who have recently received live vaccines (such as flu vaccine inhaled through the nose). Rarely, this drug can make you more likely to get infections or may worsen any current infections. Therefore, wash your hands well to prevent the spread of infection. Avoid contact with people who have infections that may spread to others (such as chickenpox, measles, flu). Consult your doctor if you have been exposed to an infection or for more details. Though it is unlikely, this medication may slow down a child's growth if used for a long time. The effect on final adult height is unknown. See the doctor regularly so your child's height can be checked. During pregnancy, this medication should be used only when clearly needed and not for prolonged periods. Other forms of hydrocortisone (given by mouth or by injection) may harm an unborn baby. Discuss the risks and benefits with your doctor. It is unknown if this drug passes into breast milk. However, it is unlikely to harm a nursing infant. Consult your doctor before breast-feeding.

The safety of use of corticosteroids in pregnancy is not established. Topical application of corticosteroids to pregnant animal can cause abnormalities in foetal developments e.g. cleft plate and intra uterine growth retardation. It is advisable therefore to limit use of **PYL-X OINTMENT** during pregnancy, only if in the physician opinion benefits overweight the possible risks. In the absence of improvement duration should be limited to not more than two weeks. In the event of developing Irritation the use of **PYL-X OINTMENT** should be discontinued.

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

The effects of some drugs can change if you take other drugs or herbal products at the same time. This can increase your risk for serious side effects or may cause your medications not to work correctly. These drug interactions are possible, but do not always occur. Your doctor or pharmacist can often prevent or manage interactions by changing how you use your medications or by close monitoring. To help your doctor and pharmacist give you the best care, be sure to tell your doctor and pharmacist about all the products you use (including prescription drugs, non - prescription drugs, and herbal products) before starting treatment with this product. While using this product, do not starts, stop, or change the dosage of any other medicines you are using without your doctor's approval. Some products that may interact with this drug include: aldesleukin, "blood thinners" (such as warfarin), vaccines. Check all prescription and non- prescription medicine labels carefully since many medications contain pain relievers/fever reducers (including aspirin, salicylates, NSAIDs such as ibuprofen, naproxen) that may increase your risk of bleeding when taken with corticosteroids. However, if your doctor has directed you to take low-dose aspirin for heart attack or stroke prevention (usually at dosages of 81-325 milligrams a day), you should continue taking the aspirin unless your doctor instructs you otherwise, Ask your pharmacist about using those products safely. This document does not contain all possible drug interactions. Keep a list of all the products you use. Share this list with your doctor and pharmacist to lessen your risk for serious medication problems.

4.6 Fertility, pregnancy and lactation

PYL-X OINTMENT should be used with caution during the first trimester of pregnancy. Lignocaine and hydrocortisone acetate are excreted into breast milk in small amounts. Any effect on the nursing infant seems unlikely at therapeutic doses of **PYL-X OINTMENT**.

4.7 Effects on ability to drive and use machines

Depending on the dose local anaesthetics may have a very mild effect on mental function and co - ordination even in the absence of overt CNS toxicity and may temporarily impair locomotion and alertness. With recommended doses of PYL-X OINTMENT adverse effects on the CNS are unlikely.

4.8 Undesirable effects

Burning, itching, dryness, skin/hair follicle irritation, and changes in skin color around the rectal area may occur. If any of these effects persist or worsen, tell your doctor or pharmacist promptly. Rarely, it is possible this medication will be absorbed into the bloodstream. This can lead to side effects of too much corticosteroid. These side effects are more likely in children and people who use this medication for a long time. Tell your doctor right away if any of the following side effects occur unusual/extreme tiredness, weight loss, headache, swelling ankles/feet, increased thirst/urination, vision problems. Tell your doctor immediately if any of these unlikely but serious side effects occur: new or persistent rectal bleeding, unusual bruising/bleeding, black/tarry stools, vomit that looks like coffee grounds, stomach/ abdominal pain, bone pain, easily broken bones, mental/mood changes (such as depression, mood swings, agitation), muscle weakness/pain, irregular heartbeat, signs of infection (such as fever, persistent sore throat, painful urination, worsening redness/irritation near the anus). A very serious allergic reaction to this drug is rare. However, seek immediate medical attention if you notice any symptoms of a serious allergic reaction, including rash, itching/ swelling (especially of the face/tongue/throat), severe dizziness, trouble breathing. This is not a complete list of possible side effects. If you notice other effects not listed above, contact your doctor or pharmacist.

4.9 Overdose

This medicine is for Rectal use only. Do not take by mouth. Follow the directions on the prescription label. Wash your hands before and after use. Do not cover with a bandage or dressing unless your doctor or health care professional tells you so. Use your medicine at regular intervals. Do not use it more often than directed. Talk to your paediatrician regarding the use of this medicine in children. Special care may be needed.

Over dosage: If you think you've taken too much of this medicine contact a poison control centre or emergency room at once.

5. Pharmacological properties

5.1Pharmacodynamic Properties:

Pharmacotherapeutic group: Topical anti hemorrhoidal.

ATC code: C05A X

Hydrocortisone is the most important human glucocorticoid. It is essential for life and regulates or supports a variety of important cardiovascular, metabolic, immunologic and homeostatic functions. Topical hydrocortisone is used for its anti-inflammatory or immunosuppressive properties to treat inflammation due to corticosteroid-responsive dermatoses. Glucocorticoids are a class of steroid hormones characterised by an ability to bind with the cortisol receptor and trigger a variety of important cardiovascular, metabolic, immunologic and homeostatic effects. Glucocorticoids are distinguished from mineralocorticoids and sex steroids by having different receptors, target cells, and effects. Technically, the term corticosteroid refers to both glucocorticoids and mineralocorticoids, but is often used as a synonym for glucocorticoid. Glucocorticoids suppress cell-mediated immunity. They act by inhibiting genes that code for the cytokines IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-8 and TNF-alpha, the most important of which is the IL-2. Reduced cytokine production limits T cell proliferation. Glucocorticoids also suppress humoral immunity, causing B cells to express lower amounts of IL-2 and IL-2 receptors. This diminishes both B cell clonal expansion and antibody synthesis. The diminished amounts of IL-2 also leads to fewer T lymphocyte cells being activated.

5.2 Pharmacokinetic properties:

Lidocaine is absorbed following topical administration to mucous membranes, its rate and extent of absorption being dependent upon concentration and total dose administered the specific site of application, and duration of exposure. In general, the rate of absorption of local anesthetic agents following topical application is most rapid after intratracheal and bronchial administration. Lidocaine is also well absorbed from the gastrointestinal tract, but little intact drug appears in the circulation because of biotransformation in the liver.

Normally about 65% of the lidocaine is bound to plasma proteins. Amide local anaesthetics are mainly bound to alpha-1-acid glycoprotein, although they are also bound to albumin.

Lidocaine crosses the blood-brain and placental barriers, presumably by passive diffusion. The main elimination pathway of lidocaine is by liver metabolism. The primary route of lidocaine in human is N-dealkylation to monoethylglycine-xylidine (MEGX), followed by hydrolysis to 2, 6- xylidine and hydroxylation to 4-hydroxy -2,6-xylidide. MEGX can also be further dealkylated to glycine xylidide (GX).

The pharmacological/toxicological actions of MEGX and GX are similar to, but less potent than, those of lidocaine. GX has a longer half-life (about 10 h) than lidocaine and may accumulate during long-term administration. Approximately 90% of the lidocaine administered intravenously is excreted in the form of various metabolites, while less than 10% is excreted unchanged in the urine. The primary metabolite in urine is a conjugate of 4 -hydroxy-2, 6- xylidine, accounting for about 70-80% of the dose excreted in the urine.

The elimination half-life of lidocaine following an intravenous bolus injection is typically 1.5 to 2.0 hours. Because of the rapid rate at which lidocaine is metabolized, any condition that affects liver function may alter lidocaine kinetics. The half-life may be prolonged two-fold or more in patients with liver dysfunction. Renal dysfunction does not affect lidocaine kinetics but may increase the accumulation of metabolites.

Factors such as acidosis and the use of CNS stimulants and depressants Affect the CNS levels of lidocaine required to produce overt systemic effects.

Objective adverse manifestations become increasingly apparent with increasing venous plasma levels above 6.0 g free base per ml.

Less than 50% of hydrocortisone is absorbed following rectal application. When administered by topical application, particularly under an occlusive dressing or when the skin is broken, sufficient corticosteroid may be absorbed to give systemic effects.

Corticosteroids in the circulation are extensively bound to plasma proteins, mainly to globulin and less to albumin. Only unbound hydrocortisone has pharmacological effects or is metabolised.

Absorption

In normal subjects, about 26 percent of hydrocortisone acetate is absorbed when the hydrocortisone acetate is applied to the rectum. Absorption of hydrocortisone acetate may vary across abraded or inflamed surfaces.

Topical steroids are primarily effective because of their anti-inflammatory, anti-pruritic and vasoconstrictive action.

Elimination

Rifampin and phenytoin (Dilantin, Dilantin-125) may increase the elimination of hydrocortisone from the body, reducing its effectiveness. Troleandomycin and ketoconazole may reduce the elimination of hydrocortisone, possibly leading to increased side effects.

Renal impairment

The pharmacokinetics and bioavailability of hydrocortisone after rectal administration of a hydrocortisone acetate foam were determined after single and multiple dosing in healthy subjects as well as in patients with inflammatory bowel disease. Endogenous hydrocortisone was suppressed by dexamethasone administration. Plasma levels were compared with those observed after intravenous administration of hydrocortisone. Only a very small part of the rectal dose (100 mg) was absorbed; the mean absolute bioavailability was 3.1% in healthy volunteers and 4.5% in patients. There was substantial inter subject variability. Although maximum hydro cortisone levels after single or multiple doses were significantly higher (about 70%) in the patient group, the systemic bioavailability is very low so that the risk of systemic side effects after rectal administration of hydrocortisone acetate foam has to be considered very low.

General toxicity

In animal studies the toxicity noted after high doses of lidocaine consisted of effects on the central nervous and cardiovascular systems. No drug-related adverse effects were seen in reproduction toxicity studies, neither did lidocaine show a mutagenic. Potential in either in vitro or in vivo mutagenicity tests. Cancer studies have not been performed with lidocaine, due to the area and duration of therapeutic use for this drug.

5.3 Preclinical safety data

Mutagenicity & Carcinogenicity

Long-term animal studies have not been performed to evaluate the carcinogenic potential or the effect on fertility of topical corticosteroids. Studies to determine mutagenicity with prednisolone and hydrocortisone have revealed negative results. Studies of lidocaine in animals to evaluate the carcinogenic and mutagenic potential of the effect on fertility have not been conducted.

6. Pharmaceutical particulars

6.1 List of excipients

Microcrystalline Cellulose Light Liquid Paraffin White soft paraffin

6.2 Incompatibilities

None known.

6.3 Shelf life

24 months

6.4 Special precautions for storage

Do not Store above 30°C; Do not freeze, Protect from Light.

6.5 Nature and contents of container

The ointment is filled into lami tubes with white colour stand-up caps and enclosed in an outer carton. Pack sizes available are 30g.

6.6 Special precautions for disposal and other handling

Not Applicable

POM: Prescription only Medicine

7. Marketing authorisation holder

Kremoint Pharma Private Limited

B-8 Additional MIDC, Ambernath Ambernath (E). Thane 421506

8. Marketing authorisation number(s):

TAN 22 HM 0375

9. Date of first authorisation/renewal of the authorisation

21/09/2022

10. Date of revision of the text:

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