Imiquimod (i-mi-ki-mod)
Aldara, Vyloma, Zyclara

**Classification**
Therapeutic: antivirals, immune modifiers
Pharmacologic: immune response modifiers

**Pregnancy Category:** C

**Indications**
External genital or perianal warts/condylomata (condyloma acuminatum). Typical, nonhyperkeratotic, nonhypertrophic actinic keratoses on the face or scalp. Biopsy-confirmed, primary superficial basal cell carcinoma (Aldara only).

**Action**
May induce the formation of interferons that have antiproliferative and antiviral properties.

**Therapeutic Effects:** Regression of external genital or perianal warts/condylomata, actinic keratoses, or basal cell carcinoma lesions.

**Pharmacokinetics**

**Absorption:** Minimal absorption.

**Distribution:** Action is primarily local.

**Metabolism and Excretion:** 0.9% excreted in urine and feces.

**Half-life:** Unknown.

**TIME/ACTION PROFILE (regression of lesions)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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</thead>
<tbody>
<tr>
<td>Topical</td>
<td>10–16 wk</td>
<td>unknown</td>
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**Contraindications/Precautions**

- **Contraindicated in:** Non-known.
- **Use Cautiously in:** Previous treatment/surgery in affected area (area should be healed prior to use); Pre-existing inflammatory skin lesions (may be exacerbated); Immunocompromised patients (safety not established); Children <12 yr (safety not established).

**Adverse Reactions/Side Effects**

**CNS:** Dizziness, fatigue, headache.

**GI:** Nausea, vomiting, diarrhea.

**GU:** Dysuria, vulvar swelling.

**Local:** Irritation, pain, pruritus, burning, swelling, fungal infections (women).

- **Discontinued = Discontinued.**

**Interactions**
**Drug-Drug:** None known.

**Route/Dosage**

**External Genital Warts**

**Topical (Adults and children ≥12 yr):**
- **Aldara—** Apply thin layer to warts at bedtime every other day (3 times weekly); leave on for 6–10 hr, then rinse off with mild soap and water. Use until lesions are completely cleared or up to 16 wk.
- **Zyclara—** Apply thin layer of 3.75% cream to warts at bedtime every day; leave on for 8 hr, then rinse off with mild soap and water. Use until lesions are completely cleared or up to 8 wk.

**Actinic Keratoses**

**Topical (Adults):**
- **Aldara—** Apply thin layer to clean, dry affected area twice weekly; leave on for 8 hr, then rinse off with mild soap and water. Continue for 16 wk.
- **Zyclara—** Apply thin layer of 2.5% or 3.75% cream to clean, dry affected area once daily before bedtime; leave on for 8 hr, then rinse off with mild soap and water. Continue for 2 wk, followed by 2 wk without treatment, then begin applying cream again for another 2 wk.

**Superficial Basal Cell Carcinoma**

**Topical (Adults):**
- Apply thin layer to clean, dry affected area 5 times per week; leave on for 8 hr, then rinse off with mild soap and water. Continue for 6 wk.

**NURSING IMPLICATIONS**

**Assessment**
- Assess affected area(s) prior to and periodically during therapy.

**Potential Nursing Diagnoses**
- Risk for infection (Indications)
- Risk for infection (Patient/Family Teaching)

**Implementation**
- Do not confuse Aldara (imiquimod) with Alera (estradiol).
- **Topical:** Apply a thin film to clean and dry skin as directed prior to bedtime. Rub in well and leave on skin for time period specified. Remove by washing with mild soap and water. Discard unused cream from single-dose packet. A rest period of 2 wk away from site recommended prior to reapplication.

**Interactions**

**Drug-Drug:** None known.
several days may be taken if required for patient comfort or severity of skin reaction. Resume therapy when reaction subsides.

- Do not use occlusive dressings. If covering is needed, use cotton gauze or cotton undershirts.

**Patient/Family Teaching**

- Instruct patient on proper application technique. Emphasize the importance of washing hands before and after application and avoiding contact with eyes. Advise patient to use same cream that was prescribed. Missed doses should be applied as soon as possible then return to regular schedule.
- Advise patient to delay next dose for several days when experiencing discomfort or severe reactions. Notify health care professional if severe reactions occur.
- Advise patient to avoid sharing the medication with others.
- Instruct patient to avoid contact with affected areas while the cream is on the skin. Wash cream off of genital areas before engaging in sexual activity. Inform patient that oils in the cream weaken latex contraceptive devices, such as cervical caps, condoms, and diaphragms.
- Advise patient to avoid use of other topical medications on same treatment area unless recommended by health care professional.

**Evaluation/Desired Outcomes**

- Healing of genital or perianal warts. Treatment is continued until wart is healed or up to 16 wk.
- Healing of actinic keratosis. Treatment is continued for 16 wk.
- Resolution of superficial basal cell carcinoma lesions. Treatment is continued for 6 wk.

Why was this drug prescribed for your patient?