



## Introduction to Topical Treatments

Topical treatments for skin cancers are medications applied directly to the skin. They are often used for superficial or early non-melanoma skin cancers, such as basal cell carcinoma (BCC) and squamous cell carcinoma (SCC), as well as precancerous conditions like actinic keratosis or (IEC)/ Bowen's Disease.

It is important to note that the choice of treatment depends on factors like type, size, location and extent of cancer.

## Common Topical Treatments

### 5-Fluorouracil (5-FU)

- **Indication:** Used primarily for superficial BCC and actinic keratosis.
- **Mechanism:** An antimetabolite that inhibits DNA synthesis, leading to the destruction of cancerous cells.
- **Application:** Typically applied twice daily for 2-4 weeks.
- **Side Effects:** Skin irritation, redness, peeling, and ulceration at the application site.

### Efudex

- **Indication:** Efudex (fluorouracil 5%) and Calcipotriol are creams used together to treat precancerous skin conditions such as Actinic Keratosis.
- **Mechanism:** When combined, the treatment course can be shortened from 4–6 weeks (5-FU alone) to about 4–10 days, improving compliance and results.
- **Side Effects:** Skin irritation, redness, peeling, and ulceration at the application site.

### Imiquimod (Aldara)

- **Indication:** Effective for superficial BCC and actinic keratosis.
- **Mechanism:** A topical immune response modifier that stimulates the immune system to fight cancer cells.
- **Application:** Usually applied 3 times a week for up to 16 weeks.
- **Side Effects:** Local inflammation, redness, itching, and flu-like symptoms.

### Diclofenac Gel (Solaraze)

- **Indication:** Used for actinic keratosis.
- **Mechanism:** A non-steroidal anti-inflammatory drug (NSAID) that reduces inflammation and induces apoptosis in cancer cells.
- **Application:** Applied twice daily for 60-90 days.

- **Side Effects:** Localised skin irritation and rash.

Topical retinoids may reduce the risk of non-melanoma skin cancers (like basal cell carcinoma and squamous cell carcinoma) by promoting healthy skin cell turnover and reducing abnormal growth.

## Treatment of Actinic Keratosis

These precancerous lesions can be treated with topical retinoids to help reverse changes caused by sun damage and prevent progression to skin cancer. They can also be used as a pre-treatment for thick actinic keratosis.

- **Application:** Apply a thin layer to the affected area once daily, preferably at night, for 6 weeks.
- **Sun Protection:** Retinoids can increase skin sensitivity to sunlight, so daily use of broad-spectrum sunscreen is essential during treatment.

## Considerations

- **Patient Selection:** Topical treatments are best suited for superficial cancers and may not be effective for deeper tumors.
- **Monitoring:** Regular follow-ups are necessary to assess treatment response and manage side effects.
- **Combination Therapy:** Sometimes used in conjunction with other treatments, such as surgery or photodynamic therapy, for better outcomes.

## Conclusion

Topical treatments for skin cancers offer effective options for managing surface-level malignancies. Patients should discuss with their healthcare provider to determine the most appropriate treatment plan tailored to their specific condition. Always report any adverse effects experienced during treatment.

---

## References

- National Cancer Institute
- American Academy of Dermatology
- Clinical guidelines and recent studies on topical dermatologic therapies

**This information sheet serves as a general guide and should not replace professional medical advice.**