

Permethrin Therapeutic Cheat Sheet

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TRADE NAME

- > Elimite
- > Acticin
- > Nix

MECHANISM OF ACTION^{4,6}

- > Binds to voltage-gated sodium ion channels in the nerve membranes of arthropods, which disrupts sodium transport by inducing depolarization, delaying repolarization, and ultimately causing respiratory paralysis in affected arthropods.

FDA APPROVED FOR^{4,6}

- > Scabies
- > Pediculosis capitis

OFF-LABEL DERMATOLOGIC USES^{2,6}

- > Pediculosis pubis
- > Pediculosis corporis
- > Cutaneous larva migrans
- > Demodex infestations
- > Periorofacial dermatitis
- > Cutaneous myiasis

DOSING^{4,6,7}

- > Topical 1% cream/lotion (over the counter)
 - > Pediculosis infestations: for infants ≥ 2 months or adults: wash hair with conditioner free shampoo, rinse and dry, then apply enough cream or lotion to saturate the hair and scalp, including behind the ears and nape of the neck, or other affected areas, leave in hair for 10 minutes, then rinse off with warm water, remove remaining nits with a nit comb. A single application is usually sufficient; however, may repeat regimen 7 days later if nits still present.
- > Topical 5% (prescription only)
 - > Scabies: for infants ≥ 2 months or adults: apply to the entire body neck to soles of the feet, leave on for 8 to 14 hours before removing by washing. In infants or older adults, apply to the hairline, neck, scalp, temple, and forehead. One application is generally curative; however may repeat in 14 days if living mites still present.
 - > Crusted Scabies: for infants ≥ 2 months: apply to the entire body neck to soles of the feet, leave on for 8 to 14 hours before removing by washing, repeat daily for 7 days and then twice weekly until symptoms have resolved. Use in combination with ivermectin on days 1, 2, 8, 9, and 15 (and potentially on days 22 and 29 for severe cases).

SIDE EFFECTS⁴⁻⁶

- > Ocular: Conjunctival pain, redness, discharge, or chemosis
- > Cutaneous: Allergic or irritant contact dermatitis, eczema flares

DRUG INTERACTIONS^{4,6}

- > Permethrin has no known severe, serious, moderate, or mild interactions with other drugs

CONTRAINDICATIONS⁴⁻⁶

- > Known hypersensitivity to any of its components, to any synthetic pyrethroid or pyrethrin
- > Avoid direct contact with the eyes
- > Do not use permethrin on broken or secondarily infected skin
- > Reported toxicity in cats

PREGNANCY AND BREASTFEEDING^{3,6}

- > There is no evidence that permethrin poses an increased risk to the fetus, and animal studies have not shown impaired fertility or harm to the fetus
- > Permethrin is safe to use in breastfeeding women as follows: The nipple area should be cleaned of any topical products before a baby attaches to the breast to feed. Reapply the product to the washed area after feeding
- > Because less than 2% is absorbed after topical application, rapid metabolism to inactive metabolites and safe application directly on infants' skin, topical permethrin products are acceptable in nursing mothers

MONITORING⁶

- > Per European guidelines, patients with scabies should return for a follow-up 2 weeks after treatment has ended to assess resolution

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