Trifarotene Therapeutic Cheat Sheet

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TRADE NAME

> Alikef

FDA APPROVED FOR

 Topical treatment of acne vulgaris in patients 9 years of age and older.

OFF-LABEL USES

 Currently being studied in clinical trials for the treatment of early cutaneous T-cell lymphoma and lamellar icthyosis.⁴⁵

WARNINGS/PRECAUTIONS

- Use is associated with increased susceptibility and sensitivity to UV light.
- May cause severe irritation in patients with atopic dermatitis, use with caution.

MECHANISM OF ACTION

- Retinoids bind to the retinoic acid receptor (RAR), which has 3 isoforms: RAR-α, RAR-β and RAR-γ.¹ Trifarotene is the first and only approved retinoid that is a selective RAR-γ agonist, the most prevalent RAR isoform in the skin.²
- > Trifarotene has demonstrated comedolytic, anti-inflammatory and antipigmenting properties in-vivo.³
- Activation of known retinoid-modulated processes (epidermal differentiation, proliferation, stress response, retinoic acid metabolism) and novel pathways (proteolysis, transport/skin hydration, cell adhesion) in ex vivo and in vivo models, as well as in human skin.³

DOSING

- > 0.05% cream
- > Per package insert instructions, a thin layer of trifarotene should be applied to affected areas of the face and/or trunk once a day.

ADVERSE EFFECTS

- The most common adverse effects of trifarotene in two 12-week, double-blind trials (PERFECT 1 and PERFECT 2) were application-site irritation (7.5% vs 0.3% with placebo), sunburn (2.6% vs 0.5%), and application-site pruritus (2.4% vs 0.8%). Adverse effects in a 52-week trial were similar.⁶
- Severity of skin irritation generally peaks during the first 4 weeks of treatment and declines thereafter.⁶

PREGNANCY

- > Retinoids are teratogenic when absorbed systemically.
- Adverse outcomes associated with topical use of trifarotene by pregnant women have not been reported, but data is limited.⁶
- There is no data on the presence of trifarotene in human breast milk or on its effects on the breastfed infant or milk production. It has been detected in rat milk after large oral doses.⁶