Sarecycline Therapeutic Cheat Sheet

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TRADE NAME¹

> Seysara

MECHANISM OF ACTION²⁻⁷

- Sarecyline is a bacteriostatic, narrow-spectrum tetracycline that binds to the 30S subunit of the 70S bacterial ribosome, interacting with 16S ribosomal RNA to inhibit protein synthesis and bacterial growth.
- Its distinctive extended C7 moiety enables prolonged interaction with bacterial mRNA, enhancing binding stability and inhibitory activity compared with older tetracyclines.
- > Sarecycline exhibits targeted selectivity for Cutibacterium acnes and other clinically relevant gram-positive organisms implicated in acne, with reduced activity against enteric gram-negative bacteria and a lower propensity for C.acnes antimicrobial resistance.
- Due to its lower lipophilicity, Sarecycline demonstrates limited central nervous system penetration and is associated with fewer vestibular adverse effects.

FDA-APPROVED FOR¹

> Inflammatory non-nodular acne vulgaris (moderate to severe) in patients ≥9 years of age.

OFF-LABEL DERMATOLOGIC USES8,9,10

- Papulopustular rosacea
- Periorificial dermatitis
- Mucous membrane pemphigoid
- Steroid-induced rosacea
- Papulopustular eruption induced by tyrosine kinase inhibitors
- Impetiginized inflammatory dermatoses, MSSA infections

DOSING^{1,11}

> Sarecycline is a once-daily, weight-based (1.5mg/kg) oral tetracycline that can be taken with or without food.

Body weight (kg)	Tablet strength (mg
33–54	60
55–84	100
85–136	150

SIDE EFFECTS^{1,2,11,12,13}

- Nausea (1.9-4.6 %)
- **Vomiting (0.6-2.1%)**
- Headache (2.7-2.9%)
- Nasopharyngitis (2.1%)
- Vulvovaginal candidiasis (1.1%)
- Vulvovaginal mycotic infections (0.7%)
- Photosensitivity (<1%)
- Vestibular effects (<1%)

WARNINGS AND PRECAUTIONS^{1,2,11}

- > Minimize exposure to natural or artificial sunlight (e.g., tanning beds, UVA/B therapy) while using Sarecycline due to increased risk for photosensitivity.
- Intracranial hypertension may occur, presenting with headache, blurred vision, and/or papilledema.
- Prolonged use of Sarecycline may result in Clostridioides difficileassociated diarrhea.

CONTRAINDICATIONS¹

Hypersensitivity to Sarecycline, tetracyclines, or any component of the formulation.

DRUG INTERACTIONS^{1,11}

- Avoid coadministration with isotretinoin or acitretin given the increased risk for intracranial hypertension
- Concomitant use with antacids may impair absorption and decrease efficacy of Sarecycline.
- Sarecycline may interfere with the bactericidal action of penicillin thus concomitant use should be avoided.
- Sarecycline may increase serum levels of P-gp substrates (e.g. digoxin).
- Sarecycline may depress plasma prothrombin activity, increasing bleeding risk in patients on anticoagulant therapy.

PREGNANCY AND BREASTFEEDING1.11

- > Pregnancy: Use during the second and third trimesters may cause permanent yellow-gray-brown discoloration of fetal teeth, enamel hypoplasia, and reversible inhibition of bone growth.
- Lactation: Breastfeeding is not recommended, as Sarecycline is excreted in breast milk.

LAB MONITORING

> None required

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