NEXTSTEPS IN DERM

Lebrikizumab Therapeutic Cheat Sheet

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TRADE NAME

- Lebrikizumab: Ebglyss® (U.S. FDA Ebglyss)
- Loratadine: Claritin®[2]

MECHANISM OF ACTION[1-2]

- Humanized monoclonal antibody targeting IL-13, a central cytokine in the pathogenesis of AD.
- Binds to IL-13 with high affinity, preventing interaction with the IL-13Rα1 subunit, thereby inhibiting downstream Th2-mediated inflammation, while still permitting IL-13 to bind the IL-13Rα2 decoy receptor for natural clearance

FDA-APPROVED FOR[2]

- Moderate-to-severe atopic dermatitis in adults and pediatric patients ≥12 years old and weighing at least 40 kg, whose disease is not adequately controlled with topical therapies or when topical therapies are not advisable.

ADULT DOSING[2]

- Loading dose: 500 mg (two 250 mg prefilled pen or prefilled syringe) injected subcutaneously at week 0 and week 2, followed by 250 mg subcutaneously every 2 weeks until week 16 or later, when adequate clinical response is achieved.
- Maintenance dose: 250 mg subcutaneously every 4 weeks or 8 weeks, with the dosing interval individualized based on clinical response and physician judgment
- Lebrikizumab may be used with or without topical corticosteroids.

STORAGE[2]

- Store refrigerated at 2°C to 8°C (36°F to 46°F).
- Can be stored at room temperature (up to 30°C/86°F) for up to 7 days in the original carton.

OFF-LABEL DERMATOLOGIC USES

- Allergic Rhinitis
- Asthma
- Benign Familial Pemphigus
- Chronic Sinusitis and Nasal Polyps
- Eosinophilic Esophogitis
- Idiopathic Pulmonary Fibrosis
- Juvenile Bullous Pemphigoid
- Prurigo Nodularis
- COPD

ADVERSE EFFECTS[2,9-11]

- Conjunctivitis (most common ocular side effect)
- Nasopharyngitis
- Allergic conjunctivitis
- Injection site reactions
- Herpes viral infections (e.g., cold sores, herpes zoster)
- Eosinophilia (usually transient and asymptomatic)
- Less frequent: keratitis, blepharitis, dry eye
- Most adverse effects are mild or moderate in severity, with a similar safety profile in adults and adolescents

RISK OF LYMPHOMA[2]

- No increased risk of malignancy or lymphoma has been reported with IL-13 blockade to date, in contrast to certain biologic therapies whose potential association with lymphoma remains under investigation.

PREGNANCY AND LACTATION[2,12]

- Limited data in human pregnancy; two animal studies show no adverse embryofetal or developmental effects with lebrikizumab at up to 18 times the human exposure.
- IgG4 monoclonal antibodies may cross the placenta, especially during the third trimester.
- The effects on lactation and excretion in human milk remain unknown.
- ACOG Committee opinion on immune-modulating therapies in pregnancy and lactation predates the FDA approval of lebrikizumab.
- Given the limited evidence, it is recommended to use it during pregnancy only if the benefits clearly outweigh potential risks.

BASELINE MONITORING[9]

- No routine laboratory monitoring required before initiation of treatment with anti-IL-13/IL-4 biologic therapies per AAD 2024 guidelines.
- Optional:
  - CBC with differential
  - Eosinophil count
  - Clinical history of eye conditions (esp. conjunctivitis or keratitis)

FOLLOW UP MONITORING[2,9,13-14]

- No lab monitoring necessary during maintenance therapy.
- Monitor clinically for:
  - Conjunctivitis or eye irritation
    - Can be prevented or treated with: artificial tears, topical antihistamines or mast cell stabilizing drops (olopatadine), corticosteroid drops, topical calcineurin inhibitors
    - Consider ophthalmology referral for vision changes, eye pain, purulent discharge, or photophobia
  - Herpetic infection
  - Helminth infections
  - AD disease control
- Encourage completion of age-appropriate vaccines; avoid live vaccines during treatment.
- Follow up every 3 to 6 months based on clinical response.

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