

Omalizumab Therapeutic Cheat Sheet

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TRADE NAME

- > XOLAIR®

MECHANISM OF ACTION

- > Omalizumab is a monoclonal antibody that inhibits the binding of IgE to high-affinity IgE receptors (FcεRI) on the surface of mast cells, basophils and dendritic cells inhibiting IgE-mediated inflammation

FDA APPROVED FOR

- > Moderate to severe allergic asthma in patients +6 years old
- > Chronic idiopathic urticaria in patients +12 years old
- > Nasal polyps in patients +18 years old

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OFF-LABEL USES²⁻⁵

- > Angioedema
- > Atopic Dermatitis
- > Normocomplementemic Urticarial Vasculitis
- > Eosinophilic Granulomatosis with Polyangiitis (EGPA)
- > Bullous Pemphigoid
- > Contact Dermatitis

DOSING

- > Chronic Idiopathic Urticaria (CIU)⁶
- > 150 or 300 mg SC every 4 weeks
- > Dosing in CIU is not dependent on serum IgE level or body weight
- > Normocomplementemic Urticarial Vasculitis⁷
- > 300 mg SC every 4 weeks
- > Possible utility on treating atopic dermatitis*
- > Bullous pemphigoid
- > 300 mg SC every 4 weeks³⁻⁴
- > Asthma
- > Omalizumab 75 to 375 mg SC every 2 or 4 weeks
- > Determine dose (mg) and dosing frequency by serum total IgE level (IU/mL) measured before the start of treatment, and by body weight (kg). Adjust doses for significant changes in body weight during treatment⁴

SIDE EFFECTS⁸

- > Injection site reaction
- > Viral infection
- > URI symptoms
- > Migraine
- > Arthralgia
- > Fatigue
- > Dizziness
- > Nausea
- > Pruritus
- > Abdominal pain
- > Epistaxis
- > Otitis media
- > Otagia
- > Myalgia
- > Peripheral edema
- > Fever
- > Anxiety
- > Alopecia
- > Geohelminth infection
- > Thrombocytopenia

WARNINGS⁴

- > Anaphylaxis- Administer in a healthcare setting prepared to manage anaphylaxis
- > Malignancies have been observed in clinical studies (including breast, non-melanoma skin, prostate, melanoma)
- > Acute Asthma Symptoms: Do not use for the treatment of acute bronchospasm or status asthmaticus
- > Corticosteroid Reduction: Do not abruptly discontinue corticosteroids upon initiation of omalizumab therapy
- > Fever, Arthralgia, and Rash: Stop omalizumab if patients develop signs and symptoms similar to serum sickness
- > Eosinophilic Conditions: Be alert to eosinophilia, vasculitic rash, worsening pulmonary symptoms, cardiac complications, and/or neuropathy, especially upon reduction of oral corticosteroids

CONTRAINDICATIONS

- > Patients with known hypersensitivity to omalizumab or other IgE inhibitors

PREGNANCY & BREASTFEEDING⁶

- > No known risk of teratogenicity, although potential effects on a fetus are likely to be greater during the second and third trimesters of pregnancy given monoclonal antibodies transport across the placenta as pregnancy progresses
- > It is unknown if omalizumab is excreted in human breast milk

MONITORING

- > No recommended blood monitoring guidelines