

Criteria For Biologic Response and Remission

Criteria For Response To Biologic Therapy

Outcome domain	Definition of Responders	Definition of Super-Responders
Asthma exacerbations	≥50% reduction in annualized exacerbation rate	No exacerbations
FEV₁	≥100 mL improvement in post-bronchodilator FEV ₁	≥500mL improvement in post- bronchodilator FEV ₁
Asthma control	Improved asthma control by category (controlled, partial, uncontrolled)* in either GINA or ACT or ACQ	Well-controlled asthma
Long term OCS use	Any reduction in long term OCS	Cessation of long term OCS or tapering to ≤5mg/day

Adapted from Denton E et al, ISAR LUMINANT Working Group. Real-world biologics response and super-response in the International Severe Asthma Registry cohort. Allergy. 2024 Jun 22

*ACT: well controlled (>19), partially controlled (16-19), uncontrolled (<16)

GINA: well controlled (0), partly controlled (1-2), uncontrolled (3-4)

ACQ: well controlled (0-0.75), partially controlled (0.75-1.5), controlled (≥1.5)

Criteria For Asthma Remission At 12 Months

Outcome domain	Definition of remission
Clinical Remission	
Asthma control	Well controlled - ACT > 19 or GINA Score 0
Asthma exacerbations	No exacerbations
Long term OCS use	None
FEV₁	Post- bronchodilator FEV ₁ ≥ 80% or ≤100mls difference from baseline
Complete Remission (Clinical Remission + following 2 biomarkers)*	
Fractional Exhaled Nitric Oxide (FeNO)	≤ 25 ppb
Blood eosinophil count	≤ 150 cells/μl

Adapted from:

Menzies-Gow A et al. An expert consensus framework for asthma remission as a treatment goal. J Allergy Clin Immunol. 2020 Mar;145(3):757-765.

Perez-de-Llano L et al. Exploring Definitions and Predictors of Severe Asthma Clinical Remission Post-Biologic in Adults. Am J Respir Crit Care Med. 2024 May 3.

*For patients with T2-high asthma

Abbreviations:

OCS: Oral corticosteroid

FEV₁: Volume of air exhaled in the first second of a maximal forced expiration

ACT: Asthma Control Test