Xolair® (omalizumab)
(Subcutaneous)

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I. Length of Authorization

- Initial: 6 months for moderate to severe persistent asthma, chronic spontaneous urticaria (CSU), IgE-mediated food allergy, and chronic rhinosinusitis with nasal polyps (CRSwNP); 12 months for all other indications
- Renewal: 12 months for all indications

II. Dosing Limits

Max Units (per dose and over time) [HCPCS Unit]:

Allergic Asthma
- 75 billable units every 14 days

IgE-Mediated Food Allergy
- 120 billable units every 14 days

All other indications
- 60 billable units every 28 days

III. Initial Approval Criteria [1]

Coverage is provided in the following conditions:

Patient is required to meet Site of Service specialty infusion program requirements (refer to the Dean Health Plan Site of Service Policy).

Universal Criteria [1]

- Will not be used in combination with another anti-IL4, anti-IL5 or IgG2 lambda monoclonal antibody agents (e.g., benralizumab, mepolizumab, reslizumab, dupilumab, tezepelumab etc.); **AND**

Severe Persistent Allergic Asthma † [1-3,20,25,29]

- Patient is at least 6 years of age; **AND**
- Prescribed by, or in consultation with, an allergist, pulmonologist, or immunologist; **AND**

- Diagnosis of severe asthma; **AND**
- Documentation of diagnosis via skin test or RAST for specific allergy sensitivity; **AND**
- Documentation of IgE levels (> 30 IU/mL) prior to treatment to verify correct dosing; **AND**
- History of 2 or more asthma exacerbations requiring treatment with systemic corticosteroids or emergency department visit or hospitalization for treatment of asthma within the past year despite adherent utilization of either an inhaled corticosteroid (ICS) with 1 additional asthma controller medication or maximally tolerated inhaled corticosteroid/long-acting beta agonist (ICS/LABA) combination product; **AND**
- Prescriber attests to all of the following:
    - Patient adherence to controller medications
    - Patient is a non-smoker or is adherent to an attempt at smoking cessation
    - Patient will not be using in combination with another targeted immunomodulator product used for asthma

Chronic Idiopathic Urticaria/Chronic Spontaneous Urticaria (CIU/CSU) † [1,4-6,8,28]

- Patient is at least 12 years of age; **AND**
- Prescribed by, or in consultation with, an allergist, dermatologist, or immunologist; **AND**
- Trial of high dose H1-antihistamine product**** was ineffective, contraindicated, or not tolerated

Note: renewals will require documentation of positive clinical response

IgE-Mediated Food Allergic Reactions [1,30,32]

- Patient is 1 year of age or older; **AND**
- Prescribed by, or in consultation with, an allergist or immunologist; **AND**
- Diagnosis of an IgE-mediated food allergy; **AND**
- Patient's allergy must be confirmed by at least one of the following:
    - Positive skin prick test (SPT)
    - Positive food specific serum IgE; **AND**
- One of the following:
    - Diagnosis confirmed by a positive oral food challenge; **OR**
    - History of anaphylaxis to the suspected food allergen; **AND**
- Injectable epinephrine has previously been dispensed or will be prescribed along with omalizumab (Xolair); **AND**
- Omalizumab (Xolair) will be used in conjunction with strict adherence to allergen avoidance; **AND**
- Will not be used in combination with peanut allergen powder (Palforzia); **AND**
- Documentation of pretreatment serum IgE levels to verify correct dosing

*Components of severity for classifying asthma as severe may include any of the following (not all inclusive): [2,25]	
• Symptoms throughout the day • Nighttime awakenings, often 7x/week • SABA use for symptom control occurs several times daily • Extremely limited in normal activities • Lung function (percent predicted FEV_1) <60% • Exacerbations requiring oral systemic corticosteroids are generally more frequent and intense relative to moderate asthma	
**H1 Antihistamine Products (not all inclusive) [5,8]	
First Generation H1 • brompheniramine • carbinoxamine • chlorpheniramine • clemastine • cyproheptadine • dexchlorpheniramine • diphenhydramine • doxepin • hydroxyzine • triprolidine	Second Generation H1 • cetirizine • desloratadine • fexofenadine • levocetirizine • loratadine

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria [1]

- Patient continues to meet the universal and other indication-specific relevant criteria identified in section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: symptoms of anaphylaxis (bronchospasm, hypotension, syncope, urticaria, and/or angioedema), malignancy, symptoms similar to serum sickness (fever, arthralgia, and rash), parasitic (helminth) infection, eosinophilic conditions (e.g., vasculitic rash, worsening pulmonary symptoms, cardiac complications, and/or neuropathy, especially upon reduction of oral corticosteroids), etc.; **AND**

Severe Persistent Allergic Asthma [1-3,20,25]

- Documentation of positive clinical response; **AND**
- Diagnosis of severe asthma at baseline; AND
- Will not be used in combination with another targeted immunomodulator product used for asthma

Chronic Idiopathic Urticaria/Chronic Spontaneous Urticaria (CIU/CSU) [1,4-6,8,28]

- Documentation of positive clinical response

IgE-Mediated Food Allergic Reactions (Type 1) [1,30]

- Diagnosis of IgE-mediated food allergy; **AND**
- Prescribed by, or in consultation with, an allergist or immunologist; AND

- Will not be used in combination with peanut allergen powder (Palforzia); AND
- Injectable epinephrine has been dispensed; AND
- For those less than 18 years of age
    - Documentation of an off-treatment rechallenge confirming continued presence of IgE-mediated food allergy; OR
    - Rechallenge is not appropriate for the patient at this time (with clinical rationale)

V. Dosage/Administration [1,11-13]

Indication	Dose
Allergic Asthma	75 to 375 mg administered subcutaneously by a health care provider 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 body weight (kg). See tables below.
Chronic Idiopathic Urticaria/Chronic Spontaneous Urticaria	150 or 300 mg administered subcutaneously by a health care provider every 4 weeks. Dosing is not dependent on serum IgE (free or total) level or body weight.
IgE-Mediated Food Allergy	75 to 600 mg administered subcutaneously by a health care provider 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 body weight (kg). See table below.

Asthma Omalizumab Doses Administered Every 4 Weeks (mg) in patients ≥ 12 years				
Pre-treatment serum IgE (IU/mL)	**Body weight (kg)**			
	30 to 60	**> 60 to 70**	**> 70 to 90**	**> 90 to 150**
≥ 30 to 100	150	150	150	300
> 100 to 200	300	300	300	See the following table.
> 200 to 300	300	See the following table.	See the following table.	See the following table.

Asthma Omalizumab Doses Administered Every 2 Weeks (mg) in patients ≥ 12 years				
Pre-treatment serum IgE (IU/mL)	**Body weight (kg)**			
	30 to 60	**> 60 to 70**	**> 70 to 90**	**> 90 to 150**
> 100 to 200	See previous table.	See previous table.	See previous table.	225
> 200 to 300	See previous table.	225	225	300
> 300 to 400	225	225	300	Do not dose.
> 400 to 500	300	300	375	Do not dose.
> 500 to 600	300	375	Do not dose.	Do not dose.
> 600 to 700	375	Do not dose.	Do not dose.	Do not dose

Asthma Omalizumab Doses Administered Every 2 or 4 Weeks (mg) for Pediatric Patients Who Begin Xolair Between the Ages of 6 to <12 Years											
Pre-treatment serum IgE (IU/mL)	**Dosing Freq. (weeks)**	**Body Weight (kg)**									
		20-25	**>25-30**	**>30-40**	**>40-50**	**>50-60**	**>60-70**	**>70-80**	**>80-90**	**>90-125**	**>125-150**
30-100	4	75	75	75	150	150	150	150	150	300	300
>100-200		150	150	150	300	300	300	300	300	225	300
>200-300		150	150	225	300	300	225	225	225	300	375
>300-400		225	225	300	225	225	225	300	300	Do Not Dose	
>400-500		225	300	225	225	300	300	375	375		
>500-600		300	300	225	300	300	375	Do Not Dose			
>600-700		300	225	225	300	375	Do Not Dose				
>700-900	2	225	225	300	375	Do Not Dose					
>900-1100		225	300	375	Do Not Dose						
>1100-1200		300	300	Do Not Dose							
>1200-1300		300	375	Do Not Dose							

IgE-Mediated Food Allergy Omalizumab Doses Administered Every 2 or 4 Weeks (mg)														
Pre-treatment serum IgE (IU/mL)	**Dosing Freq. (weeks)**	**Body Weight (kg)**												
		≥10-12	**>12-15**	**>15-20**	**>20-25**	**>25-30**	**>30-40**	**>40-50**	**>50-60**	**>60-70**	**>70-80**	**>80-90**	**>90-125**	**>125-150**
≥30-100	4	75	75	75	75	75	75	150	150	150	150	150	300	300
>100-200		75	75	75	150	150	150	300	300	300	300	300	450	600
>200-300		75	75	150	150	150	225	300	300	450	450	450	600	375
>300-400		150	150	150	225	225	300	450	450	450	600	600	450	525

>400-500		150	150	225	225	300	450	450	600	600	375	375	525	600
>500-600		150	150	225	300	300	450	600	600	375	450	450	600	
>600-700		150	150	225	300	225	450	600	375	450	450	525		
>700-800		150	150	150	225	225	300	375	450	450	525	600		
>800-900		150	150	150	225	225	300	375	450	525	600			
>900-1000		150	150	225	225	300	375	450	525	600				
>1000-1100		150	150	225	225	300	375	450	600	Do Not Dose				
>1100-1200	2	150	150	225	300	300	450	525	600					
>1200-1300		150	225	225	300	375	450	525						
>1300-1500		150	225	300	300	375	525	600						
>1500-1850			225	300	375	450	600							

VI. Billing Code/Availability Information

HCPCS Code:

- J2357 – Injection, omalizumab, 5 mg; 1 billable unit = 5 mg

NDC:

- Xolair 75 mg single-dose prefilled syringe or autoinjector: 50242-0214-xx
- Xolair 150 mg single-dose prefilled syringe or autoinjector: 50242-0215-xx
- Xolair 150 mg single-dose vial powder for injection: 50242-0040-xx
- Xolair 300 mg single-dose prefilled syringe or autoinjector: 50242-0227-xx

VII. References

1. Xolair [package insert]. South San Francisco, CA; Genentech, Inc.; February 2024. Accessed August 2024.
2. National Asthma Education and Prevention Program (NAEPP). Guidelines for the diagnosis and management of asthma. Expert Panel Report 3. Bethesda, MD: National Institutes of Health (NIH), National Heart, Lung, and Blood Institute (NHLBI); August 2007.

3. Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention. 2022 Update. Available from: https://ginasthma.org/wp-content/uploads/2022/07/GINA-Main-Report-2022-FINAL-22-07-01-WMS.pdf. Accessed September 2023.
4. Baiardini I, Braido F, Bindslev-Jensen C, et al. Recommendations for assessing patient-reported outcomes and health-related quality of life in patients with urticaria: a GA (2) LEN taskforce position paper. Allergy. 2011 Jul;66(7):840-4. doi: 10.1111/j.1398-9995.2011.02580.x. Epub 2011 Mar 9.
5. Zuberbier T, Aberer W, Asero R, et al. EAACI/GA^{2}LEN/EDF/WAO guideline for the Definition, Classification, Diagnosis and Management of Urticaria. The 2017 Revision and Update. Allergy. 2018 Jan 15. doi: 10.1111/all.13397.
6. Maurer M, Rosén K, Hsieh HJ, et al. Omalizumab for the treatment of chronic idiopathic or spontaneous urticaria. N Engl J Med. 2013 Mar 7;368(10):924-35. doi: 10.1056/NEJMoa1215372. Epub 2013 Feb 24.
7. Siles RI, Hsieh FH. Allergy blood testing: A practical guide for clinicians. Cleve Clin J Med. 2011 Sep;78(9):585-92. doi: 10.3949/ccjm.78a.11023.
8. Bernstein JA, Lang DM, Khan DA, et al. The diagnosis and management of acute and chronic urticaria: 2014 update. J Allergy Clin Immunol. 2014 May;133(5):1270-7.
9. Referenced with permission from the NCCN Drugs and Biologics Compendium (NCCN Compendium®) Omalizumab. National Comprehensive Cancer Network, 2024. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed August 2024.
10. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Management of Immunotherapy-Related Toxicities 1.2024. National Comprehensive Cancer Network, 2024. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed August 2024.
11. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Systemic Mastocytosis Version 3.2024. National Comprehensive Cancer Network, 2024. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed August 2024.
12. Carter MC, Robyn JA, Bressler PB, Walker JC, Shapiro GG, Metcalfe DD. Omalizumab for the treatment of unprovoked anaphylaxis in patients with systemic mastocytosis. J Allergy Clin Immunol. 2007;119(6):1550-1551.
13. Slapnicar C, Trinkaus M, Hicks L, Vadas P. Efficacy of Omalizumab in Indolent Systemic Mastocytosis. Case Rep Hematol. 2019;2019:3787586. Published 2019 Sep 16.

14. Jendoubi, F, Gaudenzio, N, Gallini, A, et al. Omalizumab in the treatment of adult patients with mastocytosis: A systematic review. Clin Exp Allergy. 2020; 50: 654– 661.
15. Busse W, Corren J, Lanier BQ, et al. Omalizumab, anti-IgE recombinant humanized monoclonal antibody, for the treatment of severe allergic asthma. J Allergy Clin Immunol. 2001;108(2):184-190.
16. Solèr M, Matz J, Townley R, et al. The anti-IgE antibody omalizumab reduces exacerbations and steroid requirement in allergic asthmatics. Eur Respir J. 2001;18(2):254-261.
17. Lanier B, Bridges T, Kulus M, et al. Omalizumab for the treatment of exacerbations in children with inadequately controlled allergic (IgE-mediated) asthma. J Allergy Clin Immunol. 2009;124(6):1210-1216.
18. Milgrom H, Berger W, Nayak A, et al. Treatment of childhood asthma with anti-immunoglobulin E antibody (omalizumab). Pediatrics. 2001;108(2):E36.
19. Saini SS, Bindslev-Jensen C, Maurer M, et al. Efficacy and safety of omalizumab in patients with chronic idiopathic/spontaneous urticaria who remain symptomatic on H1 antihistamines: a randomized, placebo-controlled study. J Invest Dermatol. 2015;135(1):67-75.
20. Holguin F, Cardet JC, Chung KF, et al. Management of severe asthma: a European Respiratory Society/American Thoracic Society guideline. Eur Respir J 2020; 55: 1900588 [https://doi.org/10.1183/13993003.00588-2019].
21. Gevaert P, Omachi TA, Corren J, et al. Efficacy and safety of omalizumab in nasal polyposis: 2 randomized phase 3 trials. J Allergy Clin Immunol. 2020 Sep;146(3):595-605. doi: 10.1016/j.jaci.2020.05.032. Epub 2020 Jun 7.
22. Fokkens WJ, Lund V, Bachert C, et al. EUFOREA consensus on biologics for CRSwNP with or without asthma. Allergy. 2019;74(12):2312–2319. doi:10.1111/all.13875.
23. Gandhi NA, Bennett BL, Graham NMH, et al. Targeting key proximal drivers of type 2 inflammation in disease. Nat Rev Drug Discov. 2016;15(1):35-50.
24. ASCIA Chronic Spontaneous Urticaria (CSU) Position Paper and Treatment Guidelines; updated July 2020. Available at: https://www.allergy.org.au/hp/papers/chronic-spontaneous-urticaria-csu-guidelines.
25. National Asthma Education and Prevention Program (NAEPP). 2020 Focused Updates to the Asthma Management Guidelines: A Report from the National Asthma Education and Prevention Program Coordinating Committee Expert Panel Working Group. Bethesda, MD: National Institutes of Health (NIH), National Heart, Lung, and Blood Institute (NHLBI); December 2020.
26. Fokkens WJ, Viskens AS, Backer V, et. al. EPOS/EUFOREA update on indication and evaluation of Biologics in Chronic Rhinosinusitis with Nasal Polyps 2023. Rhinology 2023; 61:194.
27. Rank MA, Chu DK, Bognanni A, et al. The Joint Task Force on Practice Parameters GRADE guidelines for the medical management of chronic rhinosinusitis with nasal polyposis. J Allergy Clin Immunol 2023; 151:386.
28. Zuberbier T, Abdul Latiff AH, Abuzakouk M, et al. The international EAACI/GA²LEN/EuroGuiDerm/APAAACI guideline for the definition, classification, diagnosis,

and management of urticaria. Allergy. 2022 Mar;77(3):734-766. doi: 10.1111/all.15090. Epub 2021 Oct 20.

29. Global Initiative for Asthma (GINA) Report: Global Strategy for Asthma Management and Prevention. 2023 Update. Available from: http://www.ginasthma.org/2023-gina-main-report. Accessed September 2023.
30. Wood RA, Chinthrajah RS, Rudman Spergel AK, et al; OUtMATCH study team. Protocol design and synopsis: Omalizumab as Monotherapy and as Adjunct Therapy to Multiallergen OIT in Children and Adults with Food Allergy (OUtMATCH). J Allergy Clin Immunol Glob. 2022 Jul 21;1(4):225-232. doi: 10.1016/j.jacig.2022.05.006. PMID: 37779534; PMCID: PMC10509974.
31. Muraro A, de Silva D, Halken S, et al. GA2LEN Food Allergy Guideline Group; GALEN Food Allergy Guideline Group. Managing food allergy: GA2LEN guideline 2022. World Allergy Organ J. 2022 Sep 7;15(9):100687. doi: 10.1016/j.waojou.2022.100687. PMID: 36119657; PMCID: PMC9467869.
32. Santos AF, Riggioni C, Agache I, et al. EAACI guidelines on the diagnosis of IgE-mediated food allergy. Allergy. 2023 Dec;78(12):3057-3076. doi: 10.1111/all.15902. Epub 2023 Oct 10. PMID: 37815205.
33. National Government Services, Inc. Local Coverage Article: Billing and Coding: Omalizumab (A52448). Centers for Medicare & Medicare Services. Updated on 03/04/2022 with effective dates 03/10/2022. Accessed August 2024.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
J33.0	Polyp of nasal cavity
J33.1	Polypoid sinus degeneration
J33.8	Other polyp of sinus
J33.9	Nasal polyp, unspecified
J45.50	Severe persistent asthma, uncomplicated
L29.89	Other pruritus
L29.9	Pruritus, unspecified
L50.1	Idiopathic urticaria
Z91.010	Allergy to peanuts
Z91.011	Allergy to milk products
Z91.012	Allergy to eggs
Z91.013	Allergy to seafood
Z91.018	Allergy to other foods

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

The preceding information is intended for non-Medicare coverage determinations. Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: https://www.cms.gov/medicare-coverage-database/search.aspx. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes		
Jurisdiction	**NCD/LCA/LCD Document (s)**	**Contractor**
6, K	A52448	National Government Services, Inc

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp. (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp. (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC