

Targeting house dust mites—a predominant contributor to year-round allergies—may provide the control patients are looking for¹

Indication

ODACTRA® is an allergen extract indicated as immunotherapy for the treatment of house dust mite (HDM)—induced allergic rhinitis, with or without conjunctivitis, confirmed by positive in vitro testing for IgE antibodies to Dermatophagoides farinae or Dermatophagoides pteronyssinus house dust mites, or by positive skin testing to licensed house dust mite allergen extracts. ODACTRA is approved for use in persons 12 through 65 years of age. ODACTRA is not indicated for the immediate relief of allergic symptoms.

Important Safety Information

WARNING: SEVERE ALLERGIC REACTIONS

ODACTRA can cause life-threatening allergic reactions such as anaphylaxis and severe laryngopharyngeal restriction. Do not administer ODACTRA to patients with severe, unstable or uncontrolled asthma. Observe patients in the office for at least 30 minutes following the initial dose. Prescribe auto-injectable epinephrine, instruct and train patients or parents/guardians on its appropriate use, and instruct patients or parents/guardians to seek immediate medical care upon its use. ODACTRA may not be suitable for patients with certain underlying medical conditions that may reduce their ability to survive a serious allergic reaction. ODACTRA may not be suitable for patients who may be unresponsive to epinephrine or inhaled bronchodilators, such as those taking beta-blockers.

Is HDM your patient's anchor?

HDMs may be the biggest contributors to your patient's allergic burden¹



When your patients present with4



Symptoms inside and outside allergy season



Symptoms at night or upon waking



Severe nasal congestion



A positive sensitization to HDM

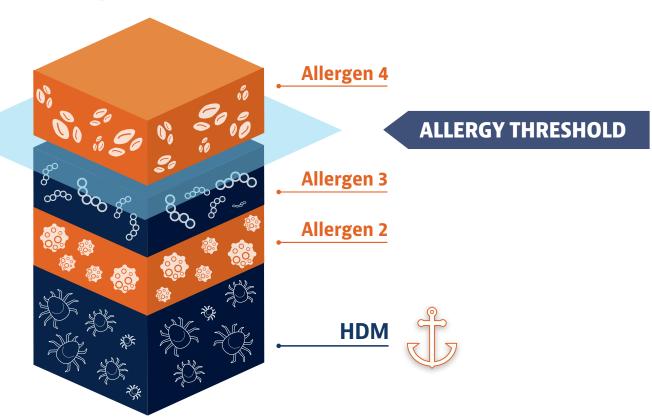
Consider targeting HDM as the allergen most responsible for their allergic burden

Important Safety Information (continued)

- ODACTRA is contraindicated in patients with:
 - Severe, unstable, or uncontrolled asthma
 - A history of any severe systemic allergic reaction
 - A history of any severe local reaction after taking any sublingual allergen immunotherapy
 - A history of eosinophilic esophagitis
 - Hypersensitivity to any of the inactive ingredients [gelatin, mannitol and sodium hydroxide] contained in this product.

Targeting HDM can help polysensitized patients, even during pollen season^{3,5}

Targeting the anchor can enable polysensitized patients to stay below the allergy threshold year-round^{3,5}





When symptomatic allergy medication isn't enough, consider targeting **HDM** with **ODACTRA**

HDM=house dust mite.

Important Safety Information (continued)

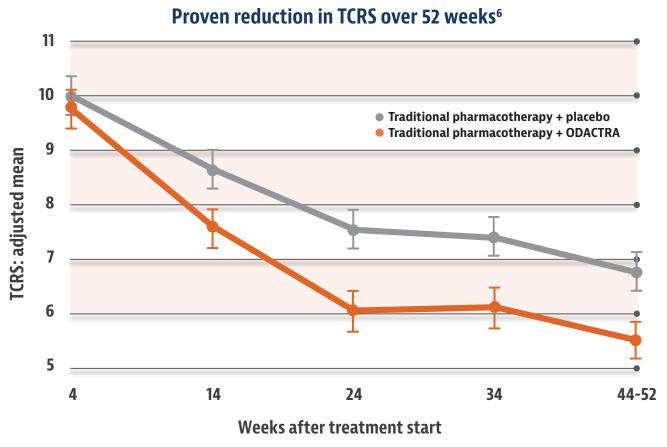
- ODACTRA can cause systemic allergic reactions including anaphylaxis which may be life-threatening. In addition, ODACTRA can cause severe local reactions, including laryngopharyngeal swelling, which can compromise breathing and be life-threatening.
- Prescribe auto-injectable epinephrine to patients receiving ODACTRA. Instruct patients (or parents/guardians) to recognize the signs and symptoms of a severe allergic reaction and in the proper use of emergency auto-injectable epinephrine. Instruct patients (or parents/guardians) to seek immediate medical care upon use of auto-injectable epinephrine and to stop treatment with ODACTRA. See the auto-injectable epinephrine package insert for complete information.



When HDM is the anchor

Target the underlying cause with ODACTRA

When added to traditonal pharmacotherapy, ODACTRA provided year-round relief, especially during pollen seasons⁶



Adapted from Demoly P et al. J Allergy Clin Immunol. 2016;137(2):444-451.e8.

- 68% of patients were polysensitized⁷
- Significant reduction in TCRS at first follow-up (week 14) and continued thereafter⁶
- During the last 8 weeks of treatment, ODACTRA plus traditional pharmacotherapy* produced a 16.1% reduction in TCRS compared with placebo plus traditional pharmacotherapy (5.71 [n=318] vs 6.81 [n=338]; 95% CI: -25.8%, -5.7%)⁷

Important Safety Information (continued)

- Administer the initial dose of ODACTRA in a healthcare setting under the supervision of a physician with experience in the diagnosis and treatment of allergic diseases and prepared to manage a life-threatening systemic or local allergic reaction. Observe patients in the office for at least 30 minutes following the initial dose of ODACTRA.
- Patients who have persistent and escalating adverse reactions in the mouth or throat should be considered for discontinuation of ODACTRA.
- Eosinophilic esophagitis has been reported in association with sublingual tablet immunotherapy. Discontinue ODACTRA and consider a diagnosis of eosinophilic esophagitis in patients who experience severe or persistent gastro-esophageal symptoms including dysphagia or chest pain.

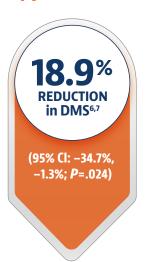
^{*}Traditional pharmacotherapy included either an oral antihistamine (desloratadine tablets, 5 mg) or a nasal steroid (budesonide nasal spray, 64 mcg/dose).6



Proven reductions in daily AR symptoms and daily medication use compared with traditional pharmacotherapy alone

The TCRS comprised the DSS and DMS.7





Significant for each individual AR symptom⁶









Blocked nose

Itchy nose

Runny nose

Sneezing

Study design: A randomized, multinational, multicenter, placebo-controlled, double-blind trial was conducted for 52 weeks in patients aged 18 to 66 years with HDM-induced AR, with or without asthma, and conjunctivitis (N=656). Mean age (years) was 32.1 ± 10.6 for ODACTRA patients and 32.2 ± 10.9 for placebo patients. There were 152 patients with HDM-induced allergic asthma for both ODACTRA and placebo. Mean duration of AR/conjunctivitis was 9.8 years and 10.0 years for ODACTRA and placebo patients, respectively. Of ODACTRA patients, 68% were polysensitized. Patients received ODACTRA or placebo, with the efficacy assessment occurring during the last 8 weeks of treatment (October 1 through March 15) to avoid overlapping symptoms caused by pollen allergy. The primary efficacy end point was the average TCRS during the last 8 weeks of treatment. The TCRS was the sum of the rhinitis DSS and rhinitis DMS. The rhinitis DSS was the sum of 4 nasal symptoms (runny nose, stuffy nose, sneezing, and itchy nose) scored on a scale of 0 (none) to 3 (severe). The rhinitis DMS was calculated based on daily use of symptom-relieving medications for nasal symptoms.⁶⁷

AR=allergic rhinitis; DMS=daily medication score; DSS=daily symptom score; HDM=house dust mite; TCRS=total combined rhinitis score.

Important Safety Information (continued)

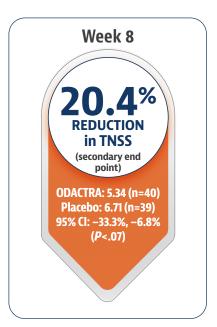
 Withhold immunotherapy with ODACTRA if the patient is experiencing an acute asthma exacerbation. Re-evaluate patients who have recurrent asthma exacerbations and consider discontinuation of ODACTRA.

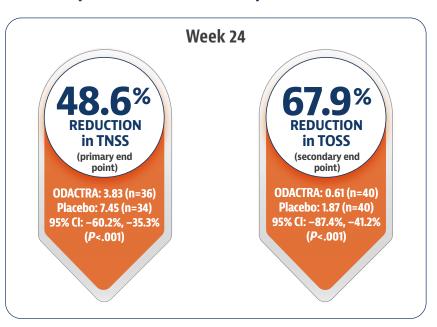


Relief can start as early as week 88

Proven reduction at week 8 in TNSS that continued through the conclusion of the study^{7,8}

Adult Environmental Exposure Chamber Study results^{7,8}





- Demonstrated significant reductions in ocular symptom scores in addition to nasal symptom scores⁸
- IgG4 levels increased with ODACTRA vs placebo at week 8 based on the prespecified analyses (P<.001)8

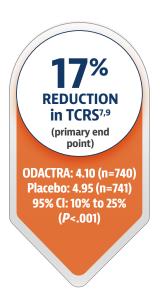
Study design: A randomized, single-site, placebo-controlled, double-blind, onset-of-action trial was conducted for 24 weeks in adults aged ≥18 years with HDM-induced AR/conjunctivitis, with or without asthma (N=83; ODACTRA=42, placebo=41), using the Vienna Challenge Chamber. Mean age (years/range) was 28 (18-58) for the ODACTRA patients and 27 (19-43) for placebo patients. Mean duration of AR/conjunctivitis was 16 years and 17 years for ODACTRA and placebo patients, respectively. Of ODACTRA patients, 88% were polysensitized. Patients received ODACTRA or placebo, and symptoms were scored every 15 minutes during exposure challenges, which occurred at screening and at weeks 8, 16, and 24. The primary efficacy end point was the average TNSS at week 24, which was the sum of the 4 nasal symptoms (runny nose, blocked nose, sneezing, and itchy nose), with a maximum score of 12. A key secondary end point was the average TOSS at weeks 8, 16, and 24. The TOSS was the sum of the 2 ocular symptoms (gritty/red/itchy eyes and watery eyes). There were 10 patients and 9 patients with asthma (ODACTRA and placebo, respectively).⁸

Important Safety Information (continued)

• ODACTRA has not been studied in subjects who are receiving concomitant allergen immunotherapy. Concomitant dosing with other allergen immunotherapy may increase the likelihood of local or systemic adverse reactions to either subcutaneous or sublingual allergen immunotherapy.



In both adults and adolescents, consistent TCRS reductions were seen in the North American Field Study, regardless of the number of sensitivities⁹





Adolescents: **22% REDUCTION** (P=0.02) in average TCRS (n=76) vs placebo (n=84)¹⁰



Adults: **16% REDUCTION** (*P*<0.001) in average TCRS (n=490) vs placebo (n=536)¹⁰

- During the last 8 weeks of the 52-week treatment period, ODACTRA combined with traditional pharmacotherapy produced a significant incremental reduction in AR symptoms vs traditional pharmacotherapy alone^{7,9}
- An 18% TCRS reduction was seen in polysensitized patients and a 17% reduction in monosensitized patients⁹
- 31% of patients had mild-to-moderate asthma, 48% had conjunctivitis, and 76% were polysensitized⁷

Study design: A randomized, multicenter, placebo-controlled, double-blind trial was conducted for 52 weeks in patients aged ≥12 years with HDM-induced AR/conjunctivitis, with or without mild-to-moderate asthma (N=1482; ODACTRA=741, placebo=741). Mean age (years ± SD) was 35 ± 14 for ODACTRA patients and 35 ± 14 for placebo patients. Mean duration of AR was 18 ± 13 years and 19 ± 13 years for ODACTRA and placebo patients, respectively. Of ODACTRA patients, 75% were polysensitized. Patients received ODACTRA or placebo, with the efficacy assessment occurring during the last 8 weeks of treatment, when HDM exposure, per physician judgment, was expected to be at its peak. The primary efficacy end point was the average TCRS during the last 8 weeks of treatment. The TCRS was the sum of the rhinitis DSS and rhinitis DMS. The rhinitis DSS was the sum of 4 nasal symptoms (runny nose, stuffy nose, sneezing, and itchy nose) scored on a scale of 0 (none) to 3 (severe). The rhinitis DMS was calculated based on daily use of symptom-relieving medications for nasal symptoms.

AR=allergic rhinitis; DMS=daily medication score; DSS=daily symptom score; HDM=house dust mite; igG4=immunoglobulin G subclass 4; SD=standard deviation; TCRS=total combined rhinitis score; TNSS=total nasal symptom score; TOSS=total ocular symptom score.

Important Safety Information (continued)

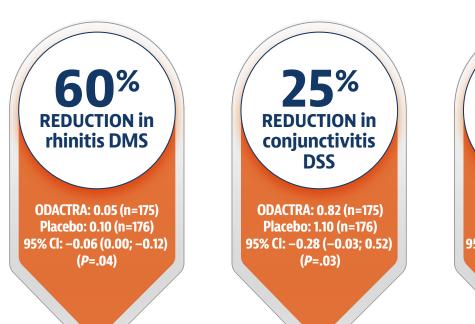
 Stop treatment with ODACTRA to allow complete healing of the oral cavity in patients with oral inflammation (e.g., oral lichen planus, mouth ulcers, or thrush) or oral wounds, such as those following oral surgery or dental extraction.

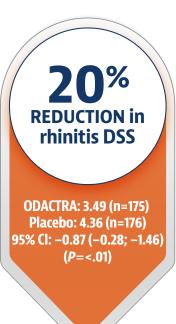


Proven effective in adolescent patients aged 12 to 17 years¹¹

22% REDUCTION IN AVERAGE TCRS

ODACTRA: 3.65 (n=175)
Placebo: 4.70 (n=176)
95% Cl: -1.04 (-1.69; -0.40)
(P<.01)





The TCRS is a sum of the DSS and DMS.

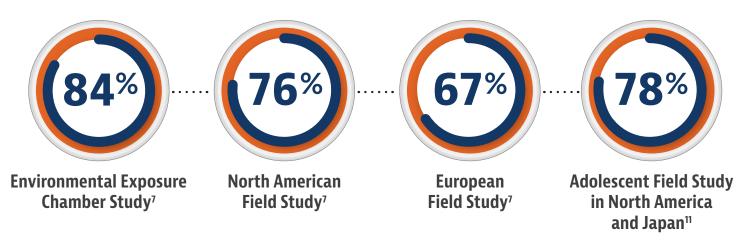
Study design: In an analysis of 2 pooled, double-blind, placebo-controlled trials conducted in North America and Japan,¹¹ patients aged 12 to 17 years (N=395) who had AR with an HDM component were randomized to up to 1 year of treatment. The primary endpoint in both trials was the average TCRS during the last 8 weeks of treatment in the active group compared with placebo. Both the ODACTRA and placebo arms of the study included the use of symptomatic medications.

Important Safety Information (continued)

• The most common solicited adverse reactions reported in clinical studies for subjects 18 through 65 years of age treated with ODACTRA vs. placebo included throat irritation/tickle (67.0% vs. 20.8% placebo), itching in the mouth (61.3% vs. 14.1%), itching in the ear (51.7% vs. 11.7%), swelling of the uvula/back of the mouth (19.8% vs. 2.4%), swelling of the lips (17.7% vs. 2.7%), swelling of the tongue (15.8% vs. 2.1%).

The majority of patients in ODACTRA trials were polysensitized⁷





In addition to HDMs, patients were also allergic to⁷ Trees Grasses Weeds Molds Animal danders



AR=allergic rhinitis; DMS=daily medication score; DSS=daily symptom score; HDM=house dust mite; TCRS=total combined rhinitis score.

Important Safety Information (continued)

• The most common unsolicited adverse reactions reported in clinical studies for subjects 18 through 65 years of age treated with ODACTRA vs. placebo included paresthesia oral (9.2% vs. 3.2%), tongue pruritus (4.7% vs. 1.1%), oral pain (2.7% vs. 0.6%), stomatitis (2.5% vs. 1.1%), dyspepsia (2.2% vs. 0.0%).



Set patient expectations on application site and systemic adverse events

Adverse reaction profile in adult patients (18-65 years)⁷

Percentages of solicited adverse reactions within 28 days after initiation (North American Field Study, Safety Analysis Set)⁷

Adverse Reaction	Any Intensity		Severe		
	ODACTRA (n=640)	Placebo (n=631)	ODACTRA (n=640)	Placebo (n=631)	
Ear and labyrinth disorders					
Itching in the ear	51.7%	11.7%	0.3%	_	
Gastrointestinal disorders					
Itching in the mouth	61.3%	14.1%	0.2%	_	
Swelling of the uvula/back of the mouth	19.8%	2.4%	-	_	
Swelling of the lips	18.0%	2.7%	-	_	
Swelling of the tongue	15.8%	2.1%	-	_	
Nausea	14.2%	7.1%	-	_	
Tongue pain	14.2%	3.0%	-	_	
Tongue ulcer/sore on the tongue	11.6%	2.1%	-	_	
Stomach pain	11.3%	5.2%	0.2%	_	
Mouth ulcer/sore in the mouth	10.3%	2.9%	-	_	
Diarrhea	6.9%	3.6%	-	_	
Vomiting	2.5%	1.4%	-	_	
Nervous system disorders					
Taste alteration/food tastes different	10.0%	3.6%	-	_	
Respiratory, thoracic, and mediastinal disorders					
Throat irritation/tickle	67.0%	20.8%	0.3%	_	
Throat swelling	13.6%	2.4%	0.2%	_	

- Epinephrine use: As with all allergy immunotherapies, auto-injectable epinephrine is used to manage any serious adverse reactions that may occur, such as anaphylaxis, which can include trouble breathing, dizziness, nausea, vomiting, and diarrhea. In the clinical trials, use of epinephrine occurred at a rate of 0.4% (5/1279) for patients receiving ODACTRA vs. 0.2% (3/1277) for patients receiving placebo^{7,12}
- Adverse events tended to be brief (median duration, 25-60 minutes), occurred early (within minutes of administration during the first 1-7 days), and were limited in recurrence (resolution within <2 weeks)⁷
- Discontinuation rates: Overall discontinuation rates due to adverse events were 8.1% and 3.0% for ODACTRA and placebo, respectively⁷

Important Safety Information (continued)

• The most common solicited adverse reactions reported in clinical studies for adolescents 12 through 17 years of age treated with ODACTRA or placebo included throat irritation/tickle (73.4% vs. 35.8% placebo), itching in the mouth (73.4% vs. 14.7%), itching in the ear (50.0% vs. 11.6%), tongue pain (24.5% vs. 4.2%), stomach pain (23.4% vs. 15.8%), swelling of the uvula/back of the mouth (20.2% vs. 3.2%), swelling of the lips (20.2% vs. 1.1%), swelling of the tongue (19.1% vs. 3.2%), throat swelling (18.1% vs. 8.4%), nausea (17.0% vs. 9.5%).



Adverse event profile in adolescent patients (12-17 years)⁷

Percentages of solicited adverse reactions within 28 days of treatment initiation⁷

Adverse Reaction (Any Intensity)	ODACTRA (n=95)	Placebo (n=94)		
Ear and labyrinth disorders				
Itching in the ear	50.0%	11.6%		
Gastrointestinal disorders				
Itching in the mouth	73.4%	14.7%		
Tongue pain	24.5%	4.2%		
Stomach pain	23.4%	15.8%		
Swelling of the uvula/back of the mouth	20.2%	3.2%		
Swelling of the lips	20.2%	1.1%		
Swelling of the tongue	19.1%	3.2%		
Nausea	17.0%	9.5%		
Tongue ulcer/sore on the tongue	12.8%	4.2%		
Mouth ulcer/sore in the mouth	10.6%	3.2%		
Diarrhea	7.7%	2.1%		
Vomiting	4.3%	-		
Nervous system disorders				
Taste alteration/food tastes different	4.3%	4.2%		
Respiratory, thoracic, and mediastinal disorders				
Throat irritation/tickle	73.4%	35.8%		
Throat swelling	18.1%	8.4%		

- No adolescent subjects treated with ODACTRA reported serious adverse events, treatment-related systemic allergic reactions or adverse reactions treated with epinephrine⁷
- Discontinuation rates: Overall discontinuation rates due to adverse events were 10% and 1% for ODACTRA and placebo, respectively⁷

Important Safety Information (continued)

• The most common unsolicited adverse reactions reported in clinical studies for adolescents 12 through 17 years of age treated with ODACTRA vs placebo included paraesthesia oral (5.3% vs. 0.0%), oral pain (4.3% vs. 0.0%), tongue pruritus (3.2% vs. 0.0%), pruritus (2.1% vs. 1.1%), stomatitis (2.1% vs. 1.1%), and chest discomfort (2.1% vs. 0.0%).



Focus on the anchor with ODACTRA





Prevalence: Nearly 50% of patients with allergies are sensitive to HDMs¹



Polysensitized population: Approximately 68%-78% of patients in clinical trials were allergic to additional allergens^{7,11}



Broad age range: Approved in adolescents and adults 12-65 years of age⁷

HDM=house dust mite.

References: 1. Bauchau V, Durham SR. Prevalence and rate of diagnosis of allergic rhinitis in Europe. Eur Respir J. 2004;24(5):758-764. doi:10.1183/09031936.04.00013904

2. Dust mite allergy. Asthma and Allergy Foundation of America. Reviewed October 2015. Accessed September 12, 2022. https://www.aafa.org/dust-mite-allergy/

3. Canonica GW, Compalati E. Minimal persistent inflammation in allergic rhinitis: implications for current treatment strategies. Clin Exp Immunol. 2009;158(3):260-271. doi:10.1111/j.1365-2249.2009.04017.x

4. Dust mite allergy. European Centre for Allergy Research Foundation. Reviewed July 2016. Accessed September 12, 2022. https://www.ecarf.org/en/information-portal/allergies-overview/dust-mite-allergy/

5. Wickman M. When allergies complicate allergies. Allergy. 2005;60(suppl 79):14-18. doi:10.1111/j.1398-9995.2005.00852.x

6. Demoly P, Emminger W, Rehm D, Backer V, Tommerup L, Kleine-Tebbe J. Effective treatment of house dust mite-induced allergic rhinitis with 2 doses of the SQ HDM SLIT-tablet: results from a randomized, double-blind, placebo-controlled phase III trial. J Allergy Clin Immunol. 2016;137(2):444-451.e8. doi:10.1016/j.jaci.2015.06.036

7. ODACTRA. Prescribing information. ALK-Abelló, Inc.; Rev. 2023.

8. Nolte H, Maloney J, Nelson HS, et al. Onset and dose-related efficacy of house dust mite sublingual immunotherapy tablet in North American adolescents and adults in a randomized, placebo-controlled trial. J Allergy Clin Immunol. 2016;138(6):1631-1638. doi:10.1016/j.jaci.2016.06.044

9. Nolte H, Bernstein DI, Nelson HS, et al. Efficacy of house dust mite sublingual immunotherapy tablet in North American adolescents and adults in a randomized, placebo-controlled trial. J Allergy Clin Immunol. 2016;138(6):1631-1638. doi:10.1016/j.jaci.2016.06.044

10. Bernstein D, Nelson H, Sussman G, Okubo K, Maekawa Y, Nolte H. P030 similar efficacy and safety between adolescents and adults receiving house dust mite sublingual immunotherapy tablet. Ann Allergy Asthma Immunol. 2017;28(7):661

Important Safety Information (continued)

All pregnancies have a risk of birth defect, loss, or other adverse outcomes. Available data on ODACTRA
administered to pregnant women are insufficient to inform associated risks in pregnancy.

