



DEPARTMENT OF THE ARMY
BROOKE ARMY MEDICAL CENTER
FORT SAM HOUSTON, TEXAS 78234-6315

Are you a candidate for sublingual immunotherapy (SLIT)?

What is SUBLINGUAL IMMUNOTHERAPY (ALLERGY DROPS)?

Sublingual immunotherapy (SLIT / allergy drops) is the name given to allergy vaccines that are administered orally. The vaccine, rather than being administered by an injection, is administered as oral allergy drops that are placed under the tongue (“sublingual”), held there for a short period of time, and then swallowed. Sublingual immunotherapy is a unique immunotherapy modality that combines safety and convenience with excellent benefit. Popular in Europe for many years, sublingual immunotherapy is now being introduced into the United States and is gaining in popularity. The ENT clinic is pleased to be able to offer this treatment to select patients who suffer from allergic respiratory diseases.

Advantages of sublingual immunotherapy include a safety profile that allows the treatment to be administered at home, saving the patient travel time and expense, as well as clinic visits. As a result, it is an ideal treatment for patients who travel frequently or who live a long distance from the office. The lack of injections also makes sublingual immunotherapy easier to tolerate.

The primary disadvantage of sublingual immunotherapy is that it is not FDA-approved. Although SLIT accounts for almost half of all allergen immunotherapy administered in Europe, it is currently considered “investigational” and “off-label” in the United States. Even though the allergen extracts that are used for subcutaneous (injection) immunotherapy (SCIT) and for sublingual immunotherapy are the same and are licensed for use in the United States for SCIT, the FDA has not yet approved the extracts for SLIT. For this reason, should you start SLIT in this clinic, there is no guarantee you will be able to receive it in other military clinics. Also, as more US studies are done, the procedures and dosing may change in upcoming months and years.

How do I get started on sublingual immunotherapy? Your treating physician will take a medical history, complete a physical examination, and then determine whether allergies may be contributing to your symptoms or conditions (e.g. sinusitis). If your physician determines that you may be a candidate, they will give you this packet. Read through the packet thoroughly. The packet will provide important information about the use of SLIT and the procedures for our clinic, as well as guidance for setting up your initial appointment.



What conditions can be treated with sublingual immunotherapy? Our clinic is currently using sublingual immunotherapy for the treatment of respiratory allergies secondary to airborne allergens such as trees, grasses, weeds, mold, dust mites, and animal dander.

How quickly will I see relief of my allergy symptoms? Although treatment success varies from patient to patient, we anticipate improvement within the first few months of treatment. Maximum benefit may not be noted until one year of therapy has been completed. If you are not achieving expected benefit from the treatment, notify your physician and a dosing may be changed. Similar to subcutaneous immunotherapy, the recommended treatment course is 3-5 years to achieve maximal and long-lasting benefit.

How will the drops be administered? The allergen extract is provided in convenient plastic bottles with a dropper mechanism that allows easy dosing under the tongue. The drops are taken once a day. Dosing should be done in the morning, if possible, but may be done anytime throughout the day. Dosing must be done at least 30 minutes prior to bedtime. Ideally, it should be done at the same time each day. Drops are placed under the tongue and held there for 2 minutes, then swallowed. After that, there are no restrictions for eating or drinking. Also, there are no restrictions for eating or drinking prior to taking the drops.

Do the drops have any taste? Due to the glycerin additive mixed with the extract, there may be a sweet taste. The taste varies between patients depending on the allergen content. Since there are no taste buds under the tongue, however, most patients experience very little taste sensation.

What if I forget to take the drops one day? There is a dose adjustment schedule on the dosing record. In general, there will be no problem if you miss a day or two periodically. The best relief for your allergies, however, will be experienced if you are taking the treatment each and every day. As with any preventative treatment, compliance is critical for success. The appropriate cumulative therapeutic doses are achieved only if daily therapy is maintained.

How long will a treatment set last? Once you have achieved maintenance dosing, prescriptions will be prepared and designed to last approximately 3 months at a time.

Do I need to keep the vials refrigerated? The treatment vials contain a glycerin preservative, which helps maintain stability even at room temperature. It is best, however, to keep the vials refrigerated to insure maximum potency.



What are the potential side effects of sublingual immunotherapy? Reported reactions to sublingual immunotherapy include itching of the tongue or lips (the most common reaction), gastrointestinal symptoms such as nausea and cramping, skin rashes including hives, and very rarely headaches. Systemic reactions (anaphylaxis) have been reported and may include symptoms such as throat tightness, wheezing, and a drop in blood pressure. These systemic reactions are extremely rare. There has never been a reported incidence of a fatal reaction to sublingual immunotherapy, however, we recommend that you always have an oral antihistamine (e.g. Benadryl®) available for mild local reactions, as well as an epinephrine auto-injector (EpiPen®) available for systemic reactions. The majority of adverse reactions occur within 30 minutes of administration. For each clinic visit, you will be required to stay for 30 minutes after dosing. These precautionary measures will be discussed with you at the time sublingual immunotherapy is initiated.

Is there a minimum age for use of SLIT? The ENT clinic is providing therapy for both adult and pediatric patients. The absolute lower limit for pediatric patients will be 5 years old, but this will be at the discretion of the managing physician to assure the utmost safety of our patients. Pediatric patients will need to be able to comply with allergy drop administration. More importantly, the patient will need to be able to alert their family members of any symptoms of an adverse reaction.

Are there reasons I may not be able to proceed with sublingual immunotherapy? Yes, if you have any of the following, then at this time we cannot treat you with sublingual immunotherapy, but will be able to refer you to our allergy and immunology colleagues for possible treatment:

- Previous anaphylactic reaction
- Diagnosis of moderate or severe asthma
- Treatment with beta-blockers (used for hypertension, glaucoma, migraines)
- Pregnancy
- Relocation from the local area within the next year

If you are interested in proceeding, then call 210-916-9502 to schedule your intake appointment.*

* Prior to calling, please read the following page and fill out the Respiratory Symptom Questionnaire.



ALLERGIES AND ASTHMA

Our goal is to treat your allergies safely and effectively. Approximately 20% of patients with allergies have asthma, which in many cases may be undiagnosed. Patients with asthma that is unknown or uncontrolled are at higher risk for systemic reactions when undergoing allergy treatment. For this reason, we will be ordering a pulmonary function test to evaluate your respiratory status prior to the allergy intake and testing visit. At your visit, we will discuss the results and either proceed with testing or make necessary referrals to assure that any asthma is well-controlled prior to proceeding with immunotherapy.

RESPIRATORY SYMPTOM QUESTIONNAIRE

PLEASE ANSWER THE FOLLOWING BASED ON YOUR CURRENT HEALTH DURING THE PAST 4 WEEKS:

- | | | |
|----------------------------------------------------|-----|----|
| 1. If you run or climb stairs fast, do you ever... | | |
| a. cough? | YES | NO |
| b. wheeze? | YES | NO |
| c. get tight in the chest? | YES | NO |
| 2. Is your sleep ever broken by... | | |
| a. wheeze? | YES | NO |
| b. difficulty with breathing? | YES | NO |
| 3. Do you ever wake up in the morning with... | | |
| a. wheeze? | YES | NO |
| b. difficulty with breathing? | YES | NO |
| 4. Do you ever wheeze... | | |
| a. if you are in a smoky room? | YES | NO |
| b. if you are in a very dusty place? | YES | NO |



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STOP

Continue to



**if you are interested in allergy
testing and have scheduled your
appointment.**



ALLERGY TESTING

These are our specific recommendations to help us test, and possibly treat, your allergies safely and effectively:

- 1) Please read this entire information packet prior to your appointment.
- 2) Please carefully review the medication lists that are located in this packet and stop medications as directed.
- 3) In our clinic, we perform allergy testing for the majority of our patients using a skin prick testing method. Details are noted below.
- 4) On the day you are scheduled for allergy testing:
 - a. Be prepared to be in our clinic for one hour.
 - b. The morning of your appointment, please shower with plain soap and do not apply lotion, perfume, and cologne or body spray. You may use deodorant.
 - c. Testing requires access to the entire arm, please dress accordingly.
 - d. Avoid vigorous exercise for two hours prior/after your testing.

SKIN PRICK TESTING

An allergy skin test, also called a skin prick test, is used to identify the substances that are causing your allergy symptoms.

What Happens During The Test?

First, a doctor or nurse will examine the skin on your forearm and clean it with alcohol. Areas on your skin are then marked with a pen to identify each area that will be tested. If there are allergic antibodies in your system, your skin will become irritated and may itch, much like a mosquito bite. This reaction means you are allergic to that substance. Please do not scratch your arms during the test. If you are experiencing significant itching after the test is complete you will be given a topical cream to apply to your arms.

How Long Does The Test Last?

Plan to spend about an hour for the entire appointment. The allergen placement part of the test takes 5 to 10 minutes. Then, you will have to wait about 20 minutes to see how your skin reacts.



How Can I Prepare For The Test?

Inform the healthcare provider who is going to perform the skin test about all medicines you are taking, including over-the-counter medications. Thoroughly review your current medications and compare these against the list provided below. If you have any questions regarding a medication, please contact the clinic at least 7 days before your scheduled test. A number of medications must be stopped 7 days before testing, so please allow enough time to stop before testing.

Will It Hurt?

The test may be mildly irritating, but most people say it doesn't hurt much.

Is The Test Safe?

Although small amounts of allergens are introduced into your system, a skin test is very safe when performed properly. There is only a 0.02% chance of systemic reaction during skin testing.

What Happens After The Test?

The nurse and provider will measure the reaction at each skin prick site and development a management plan based on the results. The extracts and ink marks will be cleaned off your skin with alcohol. A mild cortisone cream will be applied to your arm to relieve any itching at the sites of the skin pricks. Keep the tested area on your arm uncovered when you go home.

When Should I Call My Doctor?

Call your doctor at 210-916-2985 Option 3, then 1, with any questions or concerns, but if you experience any of the following symptoms, call 911:

- Skin flushing
- Rapid heart rate
- Lightheadedness
- Wheezing
- Shortness of breath
- Feeling of impending doom

MEDICATION INSTRUCTIONS

1. The following medications must be discontinued seven (7) days prior to skin testing. Drugs that contain antihistamine or have antihistaminic effects can result in negative reactions to skin testing. As a result, it may not be possible to properly interpret skin test results and testing may need to be repeated.



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Generic Name	Brand Names
Antihistamines - First Generation	
Azatadine	Optimine
Bromphenarimine	Dimetane
Carbinoxamine	Cistin
Chlorpheniramine	Aller-Chlor, C.P.M, Chlo-Amine, Chlor-Allergy Relief, Chlor-Mal, Chlor-Trimeton, Chlorphen, Effidac-24, Ridraman
Clemastine	Allerhist-1, Contact 12hr Allergy, Tavist-1
Cyproheptadine	Periactin
Dexchlorpheniramine	Polaramine
Diphenhydramine	Actifed Sinus Day, Aler-Dryl, Banophren, Benedryl, Calm-Aid, Compoz Nighttime, Diphedryl, Diphen, Genahist, Hydramine, Nu-Med, Nytol, Scot-Tussin Allergy, Sominex, Twilite, Tylenol PM, Unisom Sleepgels
Ebastine	
Hydroxyzine	Atarax, Rezine, Vistaril
Ketotifen	Zatiden
Methdilazine	Tacaryl
Phenothiazine	Chlorpromazine, Phenergan, Prometazine, Prorex, Thorazine
Pryilamine	Nisaval
Trimaprazine	Tremaril
Tripelennamine	PBZ & PBZ-SR
Tripolidine	Myidyl
Antihistamines - Second Generation	
Astemizole	Hismanal
Azelastine	Astelin, Astepro, Optivar Ophthalmic eye drops
Cetirizine	Zyrtec
Desloratidine	Clarinx
Fexofenadine	Allegra
Levocabastine Ophthal & Nasal	Livostin
Loratadine	Alavert, Claritin
Metquitazine	Primalan, Quintadrill
Mizolastine	
Olopatadine	Patanase, Pataday and Patanol Ophthalmic eye drops
Terfenadine	Seldane
Other and Anti H2 histamines	
Cimetidine	Tagamet
Ranitidine	Zantac
Theophylline	Theo-Dur, Respbid, Slo-Bid, Theo-24, Theolair, Uniphyll, Slo-Phyllin
Dopamine	
Tricyclic Antidepressants	
Amitriptyline	Elavil, Endep, Etrafon, Limitrol, Vanatrip
Amoxampine	Asendin
Clomipramine	Anaframil
Desapramine	Norpramin
Doxepin	Adapin, Sinequan, Zonalon (topical)
Imipramine	Tofranil
Nortriptyline	Aventyl HCL, Pamelor
Protriptyline	Vivactil
Trimipramine	Surmontil
Benzodiazepines	
Alprazolam	Niravam, Xanax
Clonazepam	Klonopin, Rivotril
Diazepam	Valium
Lorazepam	Ativan, Orfidal
Midazolam	Dormicum, Hypnovel, Versed



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2. If your appointment date does not allow you to discontinue these medications within the prescribed amount of time, please contact our nurse at (210) 916-9502 to reschedule.

3. The following medications may be continued throughout testing for symptom control:
 - a. Pills – Mucinex, Phenylephrine, Pseudoephedrine, Singulair, Sudafed
 - b. Nasal sprays – Afrin, Beclomethasone, Beconase, Budesonide, Flonase, Flunisolide, Mometasone, Nasacort, Nasalcrom, Nasaril, Nasonex, Neosynephrine, Oxymetazoline, Rhinocort, Triamcinalone, Veramyst
 - c. Eyedrops – Acular, Alamast, Alocril, Alomide

4. All medications taken for conditions other than allergies should be continued as prescribed without interruption: Heart medications, blood pressure medications, etc.

5. The following medications place patients at greater risk for systemic reactions. At this time, patients undergoing management with beta-blockers will not be treated in our clinic. Do not stop taking these medications. If you are taking one of these drugs, discuss this with your prescribing physician. They may be able to prescribe an alternative medication that can control your condition, so that you may undergo allergy testing and treatment.

Beta Adrenergic Blocking Agents - Betablockers NS= nonselective	
Acebutolol -(B1 selective)	Sectral Caps
Atenolol -(B1 selective)	Tenoretic, Tenormin
Betaxolol - (B1 selective)	Betoptic (Oph), Kerlone (Ophthalmic / eye drops)
Bisoprolol -(B1 selective)	Zebeta, Ziac,
Carteolol (NS)	Cartrol Filmtab Tabs, Ocupress (Ophthalmic / eye drops)
Carvedilol (NS)	Coreg
Esmolol HCL (NS)	Brevibloc Injection
Labetalol (NS)	Normodyne, Trandate
Levobunolol	AK-Beta, Betagan (Ophthalmic / eye drops)
Metipranolol	OptiPranolol (Ophthalmic / eye drops)
Metoprolol -(B1 selective)	Lopressor HCT, Toprol-XL
Nadolol (NS)	Corgard, Corzide, Nadolol Tabs
Penbutolol (NS)	Levatol
Pindolol (NS)	Visken
Propranolol (NS)	Inderal, Inderide LA
Sotalol - (B1 selective)	Betapace, Sorine
Timolol (NS)	Betimol, Blocarden, Cosopt (Oph), Occudose (Oph) Ocumeter, Timolide, Timoptic (Ophthalmic / eye drops)