

## How is SLIT administered?

SLIT is administered as a solution or a tablet under the tongue once a day. It has to be held under the tongue for about 1 to 2 minutes before it is swallowed. You or your child should take it daily throughout the duration of the treatment (typically 3 to 5 years) and as prescribed by the doctor. The treatment should not be stopped even if you or your child feels symptomatically better.

If you are interested in the SLIT for yourself or your child, please discuss with your doctor to find out more.

For more information, please email us at: [allergy\\_kids@nuhs.edu.sg](mailto:allergy_kids@nuhs.edu.sg).

### Reference

1. Feng B, Xiang H, Jin H, Gao J, Huang S, Shi Y, Chen R, Chen B. (May 2017). Efficacy of Sublingual Immunotherapy for House Dust Mite-Induced Allergic Rhinitis: A Meta-Analysis of Randomized Controlled Trials. *Allergy Asthma Immunol Res.* 9(3):220-228. doi: 10.4168/aair.2017.9.3.220.
2. Zielen S, Devillier P, Heinrich J, Richter H, Wahn U. (May 2017). Sublingual immunotherapy provides long-term relief in allergic rhinitis and reduces the risk of asthma: A retrospective, real-world database analysis. *Allergy.* doi: 10.1111/all.13213. [Epub ahead of print]
3. Dhimi S, Kakourou A, Asamoah F, Agache I, Lau S, Jutel M, ...Sheikh A. (May 2017). Allergen immunotherapy for allergic asthma: A systematic review and meta-analysis. *Allergy.* doi: 10.1111/all.13208. [Epub ahead of print]

The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical condition.

## About the Khoo Teck Puat – National University Children's Medical Institute (KTP-NUCMI)

The KTP-NUCMI is the paediatric arm of the National University Hospital and comprises the Departments of Paediatrics, Paediatric Surgery and Neonatology. We provide comprehensive and specialised medical and surgical services for newborns, children and adolescents. NUH is the only hospital in Singapore that offers paediatric kidney and liver transplant programmes. Through a generous gift from the Estate of Khoo Teck Puat, we have set up an integrated outpatient facility with medical, diagnostic and rehabilitation services.

For more information about us, visit [www.nuh.com.sg/ktp-nucmi](http://www.nuh.com.sg/ktp-nucmi).

### Contact Us

#### 24-hour Children's Emergency

Location: NUH Main Building, Zone F, Level 1  
General Enquiry: +65 6772 5000

#### KTP-NUCMI

Location: NUH Main Building, Zone E, Level 2  
(Accessible via Kent Ridge Wing, Zone C, Level 2, Lift Lobby C)  
Operating Hours: 8.30am – 5.30pm (Mon to Fri), 8.30am – 12.30pm (Sat)  
General Enquiry: +65 6772 5736 Appointment Line: +65 6908 2222  
Email: [ktpnucmi\\_appt@nuhs.edu.sg](mailto:ktpnucmi_appt@nuhs.edu.sg)

#### 9a Viva-University Children's Cancer Centre

Location: NUH Medical Centre, Zone B, Level 9  
Operating Hours: 8am – 5.30pm (Mon to Fri)  
Appointment Line: +65 6772 5030 Fax: +65 6872 4314  
Email: [cbccappt@nuhs.edu.sg](mailto:cbccappt@nuhs.edu.sg)

#### NUH Children's Urgent Care Clinic @ Bukit Panjang

Location: Junction 10, 1 Woodlands Road, #01-22, Singapore 677899  
Operating Hours: 9am – 11pm daily (including public holidays)  
General Enquiry: +65 6219 1538 Email: [childreucc@nuhs.edu.sg](mailto:childreucc@nuhs.edu.sg)  
Website: [www.nuh.com.sg/ucc](http://www.nuh.com.sg/ucc)

#### NUH Child Development Unit @ JMC

Location: Jurong Medical Centre,  
60 Jurong West Central 3, Level 2, Singapore 648346  
Operating Hours: 8.30am – 5.30pm (Mon to Fri)  
Appointment Line: +65 6665 2530/2531 Fax: +65 6665 0158  
Email: [cdu@nuhs.edu.sg](mailto:cdu@nuhs.edu.sg) Website: [www.nuh.com.sg/cdu](http://www.nuh.com.sg/cdu)

#### NUH Child Development Unit @ Keat Hong

Location: Keat Hong Community Club,  
2 Choa Chu Kang Loop, #03-01, Singapore 689687  
Operating Hours: 8.30am – 5.30pm (Mon to Fri)  
Appointment Line: +65 6769 4537/4637 Fax: +65 6665 0158  
Email: [cdu@nuhs.edu.sg](mailto:cdu@nuhs.edu.sg) Website: [www.nuh.com.sg/cdu](http://www.nuh.com.sg/cdu)

#### National University Hospital

Location: 5 Lower Kent Ridge Road, Singapore 119074  
Tel: +65 6908 2222 Email: [contactus@nuhs.edu.sg](mailto:contactus@nuhs.edu.sg)  
Website: [www.nuh.com.sg](http://www.nuh.com.sg)



Scan QR code for  
NUH Campus Map

Information is correct at the time of printing (November 2022) and subject to revision without prior notice.

# Sublingual Immunotherapy For Respiratory Allergies



Khoo Teck Puat – National University  
Children's Medical Institute

# What is an allergy?

An allergy is an abnormal response of the body's immune system to normally harmless substances (an allergen).

Allergic rhinitis and asthma are examples of common respiratory allergies which are triggered by the body's response to common airborne allergens such as house dust mites, pollen and animal dander.

## What can I do about these allergies?

- **Avoidance of allergens** – This could be challenging since these allergens are commonly found everywhere. House dust mite allergy is the most common cause of respiratory allergies locally.
- **Medications to control and relieve symptoms** – These include antihistamines and nasal or inhaled sprays.
- **Sublingual immunotherapy** – These are medications targeting the specific allergen which is causing the respiratory symptoms. In Singapore, this is only available for the treatment of house dust mite allergy.



## What is Sublingual Immunotherapy (SLIT)?

SLIT is a treatment for people with respiratory allergic diseases. It aims to improve allergy symptoms and reduces the need for medications to treat these symptoms. This can be an effective treatment for allergic rhinitis.

## How does SLIT work?

SLIT targets the allergen, such as house dust mite, pollen and animal dander, that is responsible for your child's allergic respiratory symptoms. It modifies the body's allergic response to these specific triggers. It involves giving controlled amounts of the allergen extract regularly to help build up the body's tolerance. The only SLIT available in Singapore currently targets house dust mites.

## Who is eligible for SLIT?

You can opt for SLIT if you/your child satisfy the following criteria:

- You or your child has a respiratory allergic disease such as allergic rhinitis, allergic conjunctivitis or asthma.
- You or your child has an allergy to the allergen that the SLIT targets (i.e. house dust mite), which has been confirmed with a skin prick or blood test.
- You are interested in a treatment for yourself or your child that targets the underlying allergies rather than just controlling the symptoms with medications.
- Your child's condition was not well-controlled with initial treatment, such as nose sprays and antihistamines.
- You or your child must be at least 5 years old.

## How effective is SLIT?

There is generally a significant reduction in allergic rhinitis symptoms within the first 2 to 6 months of treatment. Children with allergic rhinitis as well as asthma also experience an improvement of their asthma symptoms.

SLIT reduces the need for the use of medications and these effects can last between 5 and 10 years even after stopping treatment. If SLIT is started at a younger age, the potential benefits include the prevention of the development of asthma and new allergies.

The sustained efficacy of SLIT depends on the duration of the therapy. The minimum recommended duration of treatment is 3 years. This allows for the persistence of the effects of treatment, in particular, symptom relief and the reduced reliance on medications even after stopping SLIT.

## How safe is SLIT?

Multiple clinical trials and surveys over at least 20 years have demonstrated that SLIT is safe. The first dose is usually given under observation in the clinic with subsequent doses administered at home.

The side effects from SLIT are usually mild and local, e.g. throat and oral itch or tingling. This can be managed easily with antihistamines or by adjusting the dosage. Anaphylaxis is extremely rare. The side effects occur early on and usually improve with time.

