

Standard Operating Procedure

Administration of Seasonal Sublingual Immunotherapy (SLIT)

Seasonal allergic rhinitis is an IgE-mediated hypersensitivity inflammatory disorder characterised by watery nasal discharge, itchy nose, sneezing, nasal congestion and associated eye symptoms¹⁻³. Seasonal allergic rhinitis is a significant cause of morbidity, negatively impacting on sleep, home, work and social performance and can result in a substantially reduced quality of life (QOL)^{3,4}.

Allergen immunotherapy is recommended for patients who, despite allergen avoidance and a supervised trial of maximal pharmacotherapy, still have uncontrolled symptoms of seasonal allergic rhinitis³⁻⁵. Immunotherapy has been shown to be clinically effective, and is the only disease-modifying treatment option that can modify the IgE-mediated allergic response and induce long-term remission¹.

Sublingual immunotherapy (SLIT) has been shown to be effective in reducing the symptoms and medications required in patients with grass-pollen related seasonal allergic rhinitis^{3,5-7}. The BSACI has produced guidelines for the use of immunotherapy in patients with allergic rhinoconjunctivitis (<http://www.bsaci.org/guidelines/allergic-rhinitis>)⁶. Sublingual immunotherapy is a treatment that should be prescribed in a specialist allergy service and initiated at least eight weeks prior to the pollen season, after which the treatment may be self-administered and continued at home.

Product	Dose	Considerations
Grazax (Alk Abello) (Phleum pratense / Timothy Grass)	75,000 SQ-T	First dose needs to be administered in hospital. Only sublingual product licensed for use in the UK for patients aged 6 years and above Shared care agreement in place and GP to agree to fund treatment for three years following initiation in secondary care
Staloral (Stallergenes) 5 grasses: Cocksfoot, Timothy, Sweet vernal-grass, Rye-grass and Meadow grass.	Initial – 10 IR/ml Maintenance – 300 IR/ml	Two appointments needed in hospital one week apart. First appointment for administration of initial solution, and second appointment for

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<p>4 Trees: Alder, Birch, Hornbeam, Hazel</p>		<p>administration of maintenance solution</p>
<p>Oralair (Stallergenes)</p> <p>5 Grasses: Timothy, Cocksfoot, Rye, Sweet vernal and Meadow</p>	<p>Initial – 100 IR/ml</p> <p>Maintenance – 300 IR/ml</p>	<p>First dose needs to be administered in hospital.</p> <p>Three day initiation period –</p> <ul style="list-style-type: none"> • Day 1 – 1x100 IR/ml • Day 2 – 2x100 IR/ml • Day 3 – 1x300 IR/ml • Continue on 300 IR/ml
<p>Oralvac Compact (Allergy Therapeutics)</p> <p>Tree (Birch, Alder, Hazel, Olive, Cypress)</p> <p>Grass (B2 Grass pollens, Rye)</p> <p>Weed pollen</p> <p>Moulds</p>	<p>Initial - 1 pump (green bottle)</p> <p>Maintenance - 3 pumps (red bottle) (0.21mls) daily or for at least 8 months of the year.</p>	<p>First dose needs to be administered in hospital.</p> <p>Up-dose by increasing number of pumps/day, and moving from green bottle to yellow bottle and finally to red bottle (highest concentration)</p> <p>Up dosing can occur over 1 day or prolonged over 10 days.</p> <p>Licensed for patients from age 2 years.</p>

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How to administer SLIT

- Sublingual immunotherapy should be initiated in a clinical area that has resuscitation facilities and where clinical staff are equipped to manage anaphylaxis.
- Informed consent should be obtained by patient or in the case of a child, a carer with parental responsibility and assent given by the child.
- Patients should be advised that they must be well on the day of administration and if they have asthma this should be well controlled (FEV1 >80%).
- Wash hands prior to procedure and adhere to local Trust's Infection Control Policy.

PROCEDURE	RATIONALE
1.) Check patients' name and DOB to confirm that SLIT is being administered to the correct patient	To ensure the patient receives the correct treatment
2.) Obtain baseline observations prior to commencing SLIT, including lung function testing and/or peak flow levels for patients with asthma and assessment of skin condition in those with eczema. Complete a visual inspection of the mouth, observing for oral lesions or loose teeth. If oral lesions are present, do not proceed with SLIT until the lesions have healed. Ensure patient is not unwell.	To reduce the risk of a severe or systemic reaction. To ensure patient is able to safely commence on administration of SLIT.
3.) Confirm that the patient is not pregnant.	SLIT should not be initiated in patients who are pregnant, due to the risk of anaphylaxis.
4.) The patient should refrain from eating and drinking for five minutes prior to and following administration of SLIT.	Food or drink in the oral cavity could affect the absorption of the SLIT.
5.) Administer SLIT by placing the treatment in the sublingual pocket under the base of the tongue. Please see individual SPC for product specific advice.	SLIT is absorbed via the sublingual route

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<p>6.) SLIT should remain under the tongue for between 1–2 minutes before swallowing.</p>	<p>To ensure SLIT is absorbed by the sublingual glands</p>
<p>7.) Monitor patient for any sign of an allergic reaction for 30–60 minutes following administration of SLIT.</p>	<p>An allergic reaction could occur following administration of SLIT</p>
<p>8.) Reassure patient if they experience symptoms such as oral tingling, pruritus, mild tongue swelling, itchy throat or ears that these are common side effects in the early phase of treatment</p>	<p>These are common side effects and should resolve 1 – 2 weeks after beginning SLIT.</p>
<p>9.) Promptly treat any allergic reaction or side effects of SLIT</p>	<p>To ease discomfort and prevent the development of moderate symptoms</p>
<p>10.) Advise patient that if side effects are unpleasant that they can take an oral non-sedating antihistamine 30-60 minutes prior to taking their SLIT medication.</p>	<p>Pre-dosing with an oral antihistamine in the first 1-2 weeks may help reduce unpleasant side effects in the early stage of treatment.</p>
<p>11.) Advise the patient to stop taking SLIT in the following situations:</p> <ul style="list-style-type: none"> • For 7 days following oral surgery, including dental extraction • For 7 days after shedding a deciduous tooth • If patient has an oral ulcer or open wound in the mouth or oral mucosa – to temporarily discontinue SLIT until area has healed. <p>Patients with concomitant asthma and experiencing an acute upper respiratory tract infection – to temporarily discontinue until infection has resolved.</p>	<p>To reduce the risk of SLIT being absorbed systemically through an open lesion rather than through the sublingual mucosa.</p> <p>To reduce the risk of patient experiencing exacerbation of asthma and/or respiratory symptoms.</p>
<p>12.) Document administration of SLIT, any side effects and treatment given.</p>	<p>To record administration and treatments for governance.</p>

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<p>13.) Reassess the patient prior to discharge.</p>	<p>To ensure the patient has not had an allergic reaction and is fit for discharge.</p>																								
<p>14.) Ensure the patient and/or family have the following information on discharge;</p> <ul style="list-style-type: none"> How to recognise and manage an allergic reaction Advise the patient to ensure they have immediate access to a non-sedating antihistamine. Revision and reinforcement of the importance of compliance with medication Have a supply of initial treatment and are aware of how to collect ongoing supply Written information relating to the product they are using Contact details should they require ongoing support 	<p>To ensure the patient and family are supported and aware of how to overcome any problems with their treatment.</p> <p>To treat side effects of SLIT.</p>																								
<p>15.) Advise patient to continue taking SLIT daily as prescribed (typically for the next 3 years).</p>	<p>In order to gain maximum benefit from SLIT treatment.</p>																								
<p>16.) Follow up patient as appropriate.</p> <p>Perform a retrospective seasonal global assessment of the effectiveness of immunotherapy following each season. The following is an example of a visual analogue scale (VAS) that could be used to assess effectiveness.</p> <p>In response to the question tick the response that best applies to you:</p> <p>'How has your hayfever been this year compared to previous years before you started immunotherapy?'</p> <div style="text-align: center; margin-top: 10px;"> <table border="1" style="border-collapse: collapse; width: 100%;"> <thead> <tr> <th style="font-size: small;">Assessment</th> <th style="font-size: small;">Much better</th> <th style="font-size: small;">Better</th> <th style="font-size: small;">A little better</th> <th style="font-size: small;">The same</th> <th style="font-size: small;">A little worse</th> <th style="font-size: small;">Worse</th> <th style="font-size: small;">Much worse</th> </tr> </thead> <tbody> <tr> <td style="font-size: x-small;">(+3)</td> <td style="font-size: x-small;">(+2)</td> <td style="font-size: x-small;">(+1)</td> <td style="font-size: x-small;">(0)</td> <td style="font-size: x-small;">(-1)</td> <td style="font-size: x-small;">(-2)</td> <td style="font-size: x-small;">(-3)</td> <td></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table> </div>	Assessment	Much better	Better	A little better	The same	A little worse	Worse	Much worse	(+3)	(+2)	(+1)	(0)	(-1)	(-2)	(-3)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>To monitor effects of immunotherapy.</p>
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