## Meta-analyses and Systematic Reviews of SLIT for Asthma and Rhinoconjunctivitis

### Asthma with or without rhinoconjunctivitis

<table>
<thead>
<tr>
<th>Author/year</th>
<th>Reviewed Through</th>
<th>Studies (subjects)</th>
<th>Disease Age-range</th>
<th>Allergens</th>
<th>Duration</th>
<th>Results/outcomes (95% C.I)</th>
</tr>
</thead>
</table>
| Calamita 2006 Meta-analysis | 2005 | 25 (1706) | Asthma All ages 10 studies were pediatric only | HDM (8) Pollen (14) Mixture (2) Latex (1) | 3 months to 3 years | 1) Asthma improvement (7 studies): Significant in favor of SLIT, Risk difference -0.27 (-0.33 to -0.21)  
2) Asthma symptoms (9 studies) SMD -0.38 (-0.79 to 0.03)  
3) Allergic symptoms including asthma (10 studies). SMD -1.18 (-1.93 to -0.43)  
4) Symptoms plus medication (7 studies). SMD -0.79 (-1.34 to -0.29)  
5) Medication (10 studies) SMD -0.82 (-1.25 to -0.39) |
| Penagos 2008 Meta-analysis | May 2006 | 9 (441) | Allergic asthma 3-18 years | HDM (6) Pollens (2) | 3-32 months | 1) Asthma Symptoms SMD -1.14 (-2.10 to -0.18)  
2) Asthma Medication SMD -1.63 (-2.83 to -0.44) |
| Kim 2013 Systematic review | May 2012 | 18 (1583) | Asthma and rhinoconjunctivitis 4-18 years | HDM (9) Grass (4) | 6 months to 3 years | 1) Asthma control (9 studies) Strength of Evidence (SE) high for SLIT  
2) Rhinitis symptoms (12 studies) S.E. moderate for SLIT  
3) Conjunctivitis symptoms (5 studies) S.E. moderate for SLIT.  
4) Medication scores (13 studies) S.E. Moderate for SLIT. |
| Li 2013 Systematic review | December 2012 | 63 (5131) | Asthma or Rhinoconjunctivitis 4 to 74 years | HDM (16) Grass mix (12) Other pollens (22) Molds (2) Dander (1) Multiple (5) | 3 months to 5 years | 1) Asthma control (13 studies) Strength of evidence (S.E.) high for SLIT  
2) Rhinitis symptoms (36 studies) S.E. moderate for SLIT  
3) Conjunctivitis symptoms (13 studies ) S.E. moderate for SLIT  
4) Medication scores (41 studies) S. E. moderate for SLIT |
| Eifan 2013 Systematic review | December 2012 | 20 (1217) | Asthma with or without rhinitis 5 to 75 years | HDM only | 6 to 36 months | 1) Asthma symptoms favored SLIT in 12/20 trials.  
2) Rhinitis symptoms favored SLIT in 10/17 trials  
3) Medication reduction favored SLIT in 7/17 trials  
4) The primary outcome favored SLIT in 14/20 trials. |
Rhinoconjunctivitis

<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Year</th>
<th>Study Design</th>
<th>Inclusion Criteria</th>
<th>Symptom Scores</th>
<th>Medication Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radulovic 2011 Meta-analysis</td>
<td>August 2009</td>
<td>49 (4589)</td>
<td>Allergic rhinitis with or without rhinoconjunctivitis and asthma. Adults and Children</td>
<td>Grass (23) Other pollen (25) HDM (8) Dander (1) &lt; 6 months to &gt; 1 year</td>
<td>SMD -0.49 (-0.64 to -0.34) favoring SLIT</td>
<td>SMD -0.32 (-0.43 to -0.21) favoring SLIT</td>
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<tr>
<td>Calderon 2011 Meta-analysis</td>
<td>January 2010</td>
<td>42 (3958)</td>
<td>Allergic conjunctivitis Adults and children</td>
<td>Grass (19) Trees (10) HDM (6) Weeds (6) Dander (1) 3 to 36 months</td>
<td>SMD -0.41 (-0.53 to -0.28)</td>
<td>Adults SMD -0.48 (-0.63 to -0.32) Children SMD -0.27 (-0.46 to -0.07)</td>
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<tr>
<td>Dretzke 2013 meta-analysis</td>
<td>April 2011</td>
<td>5 studies added to Radulovic 2011</td>
<td>Seasonal allergic rhinitis Adults and Children</td>
<td>Not given</td>
<td>Not given</td>
<td>Symptoms scores SMD -.33 (-0.42 to -0.25) favored SLIT</td>
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References: