**Table E15: Summary Table of Sublingual Immunotherapy- Study Characteristics, Clinical Outcomes, and Risk of Bias-SLIT**

| **Study Characteristics** | | | | | | | **Clinical Outcomes** | | | | | | | | **Quality** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | **Allergen** | **No.**  **Subject** | **Mono-**  **Sensitizd**  **Subjects** | **Children**  **Only** | **Treatm**  **Duration** | **µg per**  **month** | **Asthma** | **Asthma+**  **Rhinitis/ RC** | **Rhinitis**  **RC** | **Ocular** | **Medi-**  **cation** | **Medi-cation+**  **Symp**  **toms** | **QOL** | **PFT** | **Risk of**  **Bias** |
| Pajno, 20002 | Dust mites: D.pter | 24 | X | X | 2 years | 9.6 Der p1,  4.8 Der f | S | NR | NR | NR | S | NR | NR | NR | Low |
| Hirsch, 199743 | Dust mites: D.pter | 30 |  | X | 1 year | 47.5 Der p1 | S | NR | NS | NR | NS | NR | NR | NR | Medium |
| O'Hehir, 2009  44 | Dust mites: D.pter | 30 | X |  | 1 year | 1425 Der p1,  283 Dep p2 | NR | NR | S | NR | NR | NR | S | NR | High |
| Ippoliti, 2003  64 | Dust mites: D.pter | 86 | X | X | 6 months | 9.6 Der p1,  4.8 Der p2 | S | NR | S | NR | NR | NR | NR | S | Medium |
| Tari, 199046 | Dust mites: D. pter/D.far | 58 |  | X | 18 months | NR | S | NR | S | NS | NR | NR | NR | S | Low |
| Lue, 20067 | Dust mites: D.pter/D.far | 20 | X | X | 6 months | 500 Der f,  283.3 Der p | S | NR | NR | NR | S | NR | NR | S | Medium |
| Sambugaro, 20038 | Dust mites: D.pter/D.far | 30 |  | X | 24 weeks | 500 Der f,  283.3 Der p | S | NR | NR | NR | NS | NR | NR | S | High |
| Tahamiler\* 200714 | Dust mites: D.pter/D.far | NR |  |  | 2-3 years | NR | NR | NR | S | NR | NR | NR | NR | NR | High |
| Tseng, 200815 | Dust mites: D.pter/D.far | 63 | X | X | 3 weeks induction, 21 weeks mainten-ance | 260 Derp,  451.7 Der f | NR | NR | NS | NR | NR | NR | NR | NR | Medium |
| Bahceciler200147 | Dust mites: D.pter/D.far | 15 | X | X | 6 months | 93.3 Der p1  81.67Der f1 | S | NR | NS | NR | S | NR | NR | NR | Medium |
| Guez 200048 | Dust mites: D.pter/D.far | 72 |  |  | 24 months | 91.6 Der p1  70.83Der f1 | NR | NR | S | NR | NS | S | NR | NR | Medium |
| Bush 201145 | Dust mites:  D. far | 31 |  |  | 12-18 months | 2100 Der f1 | NR | NS | NR | NR | NS | NR | NR | S | Medium |
| Marogna 201049 | Dust mites: D. pter | 57 |  |  |  | NR | NR | NR | NR | NR | P values NR | P values NR | NR | S at 5 years | Medium |
| deBot 201116 | Dust mites: D. pter | 257 |  | X |  | 16.24 Der p1 | S | NR | NS | NS | NS | NR | NS | NR | High |
| Nelson  19933 | Animal: cat | 44 |  |  | 105 days | 12.9-257.1 Fel d1 | NR | NR | S | NR | NR | NR | NR | NR | Medium |
| Alvarez-Cuesta, 200763 | Animals: cats  NOTE: outcomes reported only during challenges, | 50 |  |  | 12 months | 15.3 Fel d1 | NR | NR | NR | NR | NR | NR | NR | NR | High |
| Pozzan  201062 | Molds: Alternaria | 52 |  |  | 3 years | 3.6 Alt a1 | NR | S | NR | NR | S | NR | NR | NR | Medium |
| D'Ambrosio 1999  1 | Weeds: Parietaria | 30 | X |  | 9 months | 1.52Par j1 | NR | S | S | S | S | S | NR | NR | Medium |
| D'Ambrosio, 1996  17\* | Weeds: Parietaria | 40 | X |  | 8 months (mid Jan to end Sep) | 1.44 Par j1 | NR | S | NR | NR | NR | S | NR | NR | High |
| la Rosa 1999  18 | Weeds: Parietaria | 41 | X | X | 2 years | 2.2 Par j1 | NR | NR | S | NR | NS | NR | NR | NR | Low |
| Pajno 2004  50 | Weeds: Parietaria | 30 |  | X | 13 months | 1.56 Par j1 | NS | NR | NS | NR | NS | NR | NR | NR | Medium |
| Passalacqua, 1999  52 | Weeds: Parietaria | 30 |  |  | 8 months | 1.0 Par j1 | NR | NR | NR | NR | S | S | NR | NR | Low |
| Bowen  200420 | Weeds: Ragweed | 83 | X |  | 3 months (estimated duration) | 3480Amba1 | NR | NR | S | NS | NS | NR | NR | NR | Medium |
| Skoner,  201021 | Weeds: Ragweed | 115 |  |  | 17 +/- 3 weeks | High 1440 Amb a1,  Low: 144 | NR | NR | NR | NR | S | S | NR | NR | Low |
| Hordijk, 199813 | Grass Mix | 69 |  |  | 10 months | NR | NR | NR | S | NR | NR | NR | NR | NR | Medium |
| Novembre\*  200426 | Grass: Grass mix | 113 |  | X | 3 years | 4.8 Der p1,  2.4 Der p2,  12.0 Group V grass  27 Bet v1,  0.7 Par j1 | NR | NR | NS | NR | S | S | NR | NR | High |
| Ott 200827 | Grass: Grass mix | 213 |  |  | 3 seasons | 500 Group V grass | NR | NR | S | NR | NS | NS | NR | NR | Medium |
| Panzer  200829 | Grass: Grass mix | 35 |  |  | 1 year | NR | NS | S | S | S | S | NR | NR | NR | Low |
| Roder\*  200730 | Grass: Grass mix | 204 |  | X | 2 years | 1260 Lol p5 | NR | NR | NS | NR | NS | NR | NS | NS | Low |
| Sabbah  199431 | Grass: Grass mix | 58 |  |  | 120 days | NR | NR | NR | NS | S | S | NR | NR | NR | Medium |
| Pradalier  199958 | Grass: Grass mix | 126 |  |  | 4 months | 233.75 Phl p5 | NR | NR | NS | NR | NS | NR | NR | NR | Medium |
| Marogna\* 200937 | Grass: Grass mix | 51 | X |  | 5 years | 70 Phl p1 | S | NR | S | NR | S | NR | NR | S | Medium |
| Feliziani  199556 | Grass: Grass Mix | 34 |  |  | until end of pollen season | NR | NR | NR | S | NR | S | NR | NR | NR | Medium |
| Pfaar 200757 | Grass: Grass mix | 185 | X |  | 1.5 years | 1200 Group V grass | NR | NR | NR | NR | NR | S | NR | NR | Medium |
| Stelmach  201138 | Grass: Grass Mix | 60 | X | X | 12 months | 300 Group V grass | NR | NR | NR | NR | NR | NR | NR | P values NR | Medium |
| De Blay 200761 | Grass Mix: Orchard, Timothy Perennial ryegrass | 118 |  |  | 10 months | 275 Group III grass | NR | NR | NS | NR | NR | NR | NR | NR | Medium |
| Lima  200225 | Grass: Timothy | 56 |  |  | 18 months | 900 Phl p5 | NS | S | NS | NS | NS | NR | NR | NR | Low |
| Pajno 201155 | Grass: Timothy | 80 |  | X | 4 months/yr for 2 years | NR | NS | NR | NR | NR | NS | NS | NR | NR | Medium |
| Horiguchi 200810 | Trees: Japanese cedar | 67 |  |  | 7 months | 6.0 Cry j1 | NR | NR | S | NR | NR | NR | NR | NR | Medium |
| Okubo 200811 | Trees: Japanese cedar | 61 |  |  | 6 months | NR | NR | NR | NS | NR | NS | NS | S | NR | Medium |
| Makino 201023 | Trees: Japanese cedar | 25 |  |  | 5 months | 60 Cry j1,  8-20 Cry j2 | NR | NR | NR | NR | NS | NS | S | NR | Medium |
| Fujimura  2011 12 | Trees:  Japanese cedar | 103 |  |  | 20 months | 6-16.8 Cry j1 | NR | NR | NR | NR | NR | S  (peak season) | S | NR | Low |
| Marogna  200533 | Trees: White birch | 79 | X |  | 3.5 years | 8.5 Bet v1 | NR | S | NR | NR | S | NR | NR | NR | Medium |
| Voltolini 2009  34 | Trees: Birch | 24 |  |  | 2 courses of 4 months (pre/ co-seasonally) | 1.725 BetV1 | S | NR | S | NR | NR | NR | NR | NR | Medium |
| Marogna  2010  35 | Trees: Birch | 33 |  |  | 5 year | 8.3 Bet v1 | S | NR | S | NR | S | NR | NR | S | High |
| Di Rienzo, 200622 | Trees: Mountain cedar | 34 |  |  | 4 to 5 months (Preseason December - April) | NR | NR | NR | NR | NR | NR | NS | S | NR | High |
| Vervloet200753 | Trees: Bald-cypress | 76 | X |  | 120 days | 6840 Jun a1 | NR | NS | NS | NS | S | NR | NR | NR | High |
| Vourdas199854 | Trees: Olive | 70 |  | X | seasonal (5 to 6 months each year) for 2 years | 736.3 Ole e1 | NR | NR | NS | NR | NS | NR | NR | NR | Medium |
| Valovirta, 2006  59 | Trees: Tree mix | 98 |  | X | 5 weeks build-up  18 months mainte-nance | High: 120 Bet v1/Aln g1/Cor a1  Low: 14.4 Bet v1/Aln g1/Cor a1 | High: S  Low:NS | High: S  Low: S | High: S  Low: S | NR | High: S  Low:  NS | NR | NR | NR | Medium |
| Marogna\* 200740 | Trees: White birch  Grass: Grass mix | 48 |  |  | 4 years | 100 Bet v1 | NR | S | NR | NR | S | S | NR | S | Medium |
| Moreno-Ancillo, 2007  42 | Grass: Grass mix  Trees: Olive | 105 | X |  | 10 months | 60 Grp V grass,  90 Ole e1 | S | NR | S | S | NS | NS | S | S | Low |
| Sambugaro\* 20039 | Dust mites : D.pter/D.far Grass: Grass mix  Weeds: Ragweed Parietaria | 24 |  |  | 2 years | 4.8 Der p1,  2.4 Der p2,  12.0 GrpV grass,  27 Bet v1,  0.7 Par j1 | NR | NR | NR | NR | NR | S | NR | S | Medium |
| Amar, 200936 | Grass: Timothy  Trees: Ash,Maple, Red/green  American elm Cottonwood  Weeds: Kochia, ragweed, Sagebrush Russian thistle | 58 |  |  | 15 months | 570 Phl p5 | NR | NR | NS | NR | NS | NR | NR | NR | Low |
| Marogna\*  2004  39 | Trees: White birch  Dust mites: D.pter  Weeds: Mugwort/ Parietaria  Grass: Grass mix | 511 |  |  | 3 years | 3.25 Der f1/f2,  5.83 Phl p1,  5.83 Par j1,  8,33 Bet v1 | NR | NR | NR | NR | NR | NR | NR | S | Medium |
| Marogna\* 200841 | Dust mite  Trees: White birch  Grass: Grass mix Weed: Parietaria | 216 |  | X | 3 years | 40 De p1,  40 Der p2,  3.33 Phl p1,  3.33 Par j1,  8,33 Bet v1 | NR | NR | NR | NR | NR | S | NR | S | High |
| Rodriguez\*, 200665 | Dust mite  Grass mix  Note: this study reported adverse events only | 135 |  |  | 3 months | 60 Grp V grass  24 Der p1/2 | NR | NR | NR | NR | NR | NR | NR | NR | Medium |

RC; Rhinoconjunctivitis, D.Pter: Dermatophagoides pteronyssinus, D.Far; Dermatophagoides farinae

\*Denotes studies in which comparator is other than a placebo group. These studies use pharmacotherapy/conventional therapy as a comparator: 4961, 1333, 4040, 4784, 3400, 3402, 3403, 3405. Study 5470 compared 3 years of sublingual immunotherapy to 2 years of sublingual immunotherapy. Study 4790 compared two groups of sublingual immunotherapy with identical maintenance dose, one group with updosing and the other without updosing.

Studies shaded in gray did not report any significant findings in any of the outcome categories on this table.

S= significant improvement in sublingual group when compared to controls and/or comparison of pre-treatment to post-treatment scores.

NS= no significant improvement

NR=not reported