

Subcutaneous immunotherapy

Comparison 1 Subcutaneous immunotherapy compared with placebo, all studies

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	17	1184	SMD (IV, random, 95% CI)	-0.65 (-0.85 to -0.45)
2 MSs	16	1103		-0.55 (-0.75 to -0.34)
3 SMSs	8	617		-0.48 (-0.67 to -0.29)

IV, inverse variance.

Comparison 2 Subcutaneous immunotherapy compared with placebo, adults

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	16	1140	SMD (IV, random, 95% CI)	-0.68 (-0.89 to -0.47)
2 MSs	15	1059		-0.53 (-0.75 to -0.32)

IV, inverse variance.

Comparison 3 Subcutaneous immunotherapy compared with placebo, <6 months

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	5	274	SMD (IV, random, 95% CI)	-1.29 (-2.10 to -0.49)
2 MSs	2	143		-0.34 (-0.68 to -0.01)
3 SMSs	3	221		-0.47 (-0.91 to -0.02)

IV, inverse variance.

Comparison 4 Subcutaneous immunotherapy compared with placebo, 6–12 months

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	2	309	SMD (IV, random, 95% CI)	-0.54 (-0.78 to -0.29)
2 MSs	3	332		-0.46 (-0.69 to -0.23)

IV, inverse variance.

Comparison 5 Subcutaneous immunotherapy compared with placebo, >12 months

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	8	442	SMD (IV, random, 95% CI)	-0.51 (-0.70 to -0.32)
2 MSs	9	469		-0.67 (-1.06 to -0.29)
3 SMSs	3	253		-0.51 (-0.76 to -0.25)
IV, inverse variance.				

Comparison 6 Subcutaneous immunotherapy compared with placebo, major allergen content <5 µg

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	3	228	SMD (IV, random, 95% CI)	-0.43 (-0.69 to -0.16)
2 MSs	2	147		-0.31 (-0.63 to 0.02)
3 SMSs	3	228		-0.39 (-0.70 to -0.07)
IV, inverse variance.				

Comparison 7 Subcutaneous immunotherapy compared with placebo, major allergen content 5–20 µg

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	5	231	SMD (IV, random, 95% CI)	-0.54 (-0.80 to -0.27)
2 MSs	6	254		-0.45 (-0.70 to -0.20)
IV, inverse variance.				

Comparison 8 Subcutaneous immunotherapy compared with placebo, >20 µg

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	3	341	SMD (IV, random, 95% CI)	-1.06 (-2.08 to -0.05)
2 MSs	2	305		-0.55 (-0.96 to -0.13)
IV, inverse variance.				

Comparison 9 Subcutaneous immunotherapy compared with placebo, grass pollen

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	9	552	SMD (IV, random, 95% CI)	-0.64 (-0.91 to -0.37)
2 MSs	8	483		-0.77 (-1.22 to -0.33)
3 SMSs	5	435		-0.43 (-0.62 to -0.24)

IV, inverse variance.

Comparison 10 Subcutaneous immunotherapy compared with placebo, Parietaria

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	3	353	SMD (IV, random, 95% CI)	-1.15 (-2.09 to -0.21)
2 MSs	2	318		-0.43 (-0.67 to -0.20)
3 SMSs	2	77		-0.96 (-1.44 to -0.49)

IV, inverse variance.

Comparison 11 Subcutaneous immunotherapy compared with placebo, tree

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	4	235	SMD (IV, random, 95% CI)	-0.46 (-0.72 to -0.20)
2 MSs	4	235		-0.34 (-0.60 to -0.09)

IV, inverse variance.

Comparison 12 Subcutaneous immunotherapy compared with placebo, QoL

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
All studies	8	955	SMD (IV, random, 95% CI)	-0.53 (-0.66 to -0.39)
Duration > 12 months	6	662		-0.47 (-0.63 to -0.31)
MAC 5–20 µg	3	381		-0.52 (-0.74 to -0.31)
MAC > 20 µg	3	379		-0.65 (-0.87 to -0.43)
Grass pollen	4	561		-0.44 (-0.61 to -0.26)
Parietaria pollen	2	316		-0.63 (-0.87 to -0.39)
RQLQ	8	955	MD (IV, random, 95% CI)	-0.74 (-0.92 to -0.56)

IV, inverse variance.

Sublingual immunotherapy

Comparison 13 Sublingual immunotherapy compared with placebo, all studies

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	42	4819	SMD (IV, random, 95% CI)	-0.33 (-0.42 to -0.25)
2 MSs	35	3779		-0.27 (-0.37 to -0.17)
3 SMSs	6	1394		-0.40 (-0.55 to -0.25)

IV, inverse variance.

Comparison 14 Sublingual immunotherapy compared with placebo, adults

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	33	3476	SMD (IV, random, 95% CI)	-0.38 (-0.49 to -0.27)
2 MSs	27	2604		-0.35 (-0.47 to -0.23)
3 SMSs	5	1087		-0.44 (-0.62 to -0.27)

IV, inverse variance.

Comparison 15 Sublingual immunotherapy compared with placebo, children

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	9	1343	SMD (IV, random, 95% CI)	-0.24 (-0.35 to -0.13)
2 MSs	8	1175		-0.08 (-0.25 to 0.08)

IV, inverse variance.

Comparison 16 Sublingual immunotherapy compared with placebo, <6 months

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	15	1882	SMD (IV, random, 95% CI)	-0.34 (-0.47 to -0.20)
2 MSs	14	1517		-0.33 (-0.47 to -0.19)
3 SMSs	2	376		-0.31 (-0.51 to -0.11)

IV, inverse variance.

Comparison 17 Sublingual immunotherapy compared with placebo, 6–12 months

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	15	1539	SMD (IV, random, 95% CI)	-0.31 (-0.47 to -0.16)
2 MSs	13	1223		-0.31 (-0.53 to -0.08)
3 SMSs	2	417		-0.66 (-1.63 to 0.30)
IV, inverse variance.				

Comparison 18 Sublingual immunotherapy compared with placebo, >12 months

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	12	1398	SMD (IV, random, 95% CI)	-0.35 (-0.52 to -0.18)
2 MSs	8	1039		-0.16 (-0.31 to -0.01)
3 SMSs	2	601		-0.48 (-0.64 to -0.31)
IV, inverse variance.				

Comparison 19 Sublingual immunotherapy compared with placebo, major allergen content <5 µg

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	6	229	SMD (IV, random, 95% CI)	-0.53 (-1.03 to -0.03)
2 MSs	5	194		-0.63 (-1.08 to -0.18)
IV, inverse variance.				

Comparison 20 Sublingual immunotherapy compared with placebo, major allergen content 5–20 µg

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	13	2287	SMD (IV, random, 95% CI)	-0.29 (-0.37 to -0.20)
2 MSs	12	2285		-0.18 (-0.30 to -0.05)
3 SMSs	3	985		-0.32 (-0.45 to -0.19)
IV, inverse variance.				

Comparison 21 Sublingual immunotherapy compared with placebo, major allergen content >20 µg

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	12	1088	SMD (IV, random, 95% CI)	-0.33 (-0.48 to -0.18)
2 MSs	10	708		-0.26 (-0.47 to -0.06)
IV, inverse variance.				

Comparison 22 Sublingual immunotherapy compared with placebo, grass pollen

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	26	4045	SMD (IV, random, 95% CI)	-0.31 (-0.39 to -0.22)
2 MSs	19	3005		-0.20 (-0.31 to -0.08)
3 SMSs	4	1299		-0.36 (-0.48 to -0.24)
IV, inverse variance.				

Comparison 23 Sublingual immunotherapy compared with placebo, ragweed

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	3	244	SMD (IV, random, 95% CI)	-0.44 (-0.48 to -0.18)
2 MSs	3	244		-0.34 (-0.60 to -0.09)
IV, inverse variance.				

Comparison 24 Sublingual immunotherapy compared with placebo, Parietaria

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	4	124	SMD (IV, random, 95% CI)	-0.27 (-0.62 to 0.09)
2 MSs	4	124		-0.49 (-0.85 to -0.13)
IV, inverse variance.				

Comparison 25 Sublingual immunotherapy compared with placebo, tree

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 SSs	9	380	SMD (IV, random, 95% CI)	-0.42 (-0.77 to -0.06)
2 MSs	9	380		-0.38 (-0.62 to -0.13)

IV, inverse variance.

Comparison 26 Sublingual immunotherapy compared with placebo, QoL

Outcome or subgroup	No. of studies	No. of participants	Statistical method	Effect size
1 All studies	7	1878	SMD (IV, random, 95% CI)	-0.37 (-0.52 to -0.22)
2 Adults	6	1658		-0.39 (-0.56 to -0.21)
3 <6 months	4	908		-0.45 (-0.74 to -0.17)
4 >12 months	2	601		-0.37 (-0.54 to -0.21)
5 MAC 5–20 µg	2	507		-0.32 (-0.49 to -0.14)
6 MAC >20 µg	2	323		-0.70 (-0.93 to -0.48)
7 RQLQ	4	924	MD (IV, random, 95% CI)	-0.34 (-0.49 to -0.18)

IV, inverse variance.

Subcutaneous immunotherapy

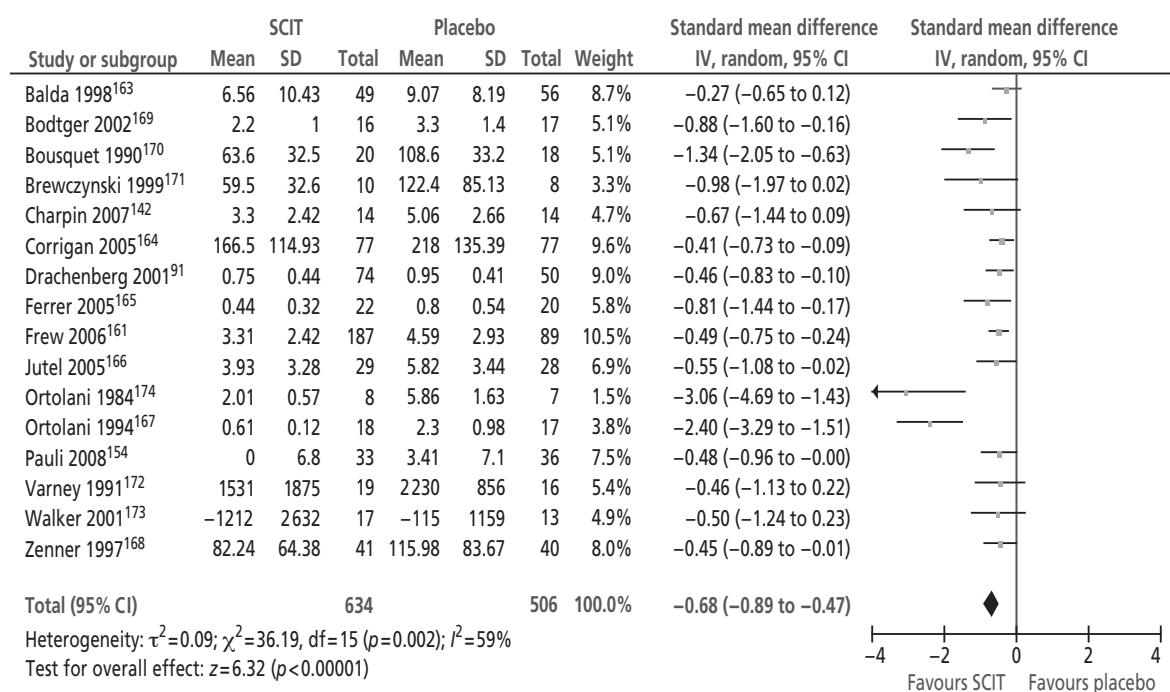


FIGURE 31 Subcutaneous immunotherapy vs placebo, adults, SSs.

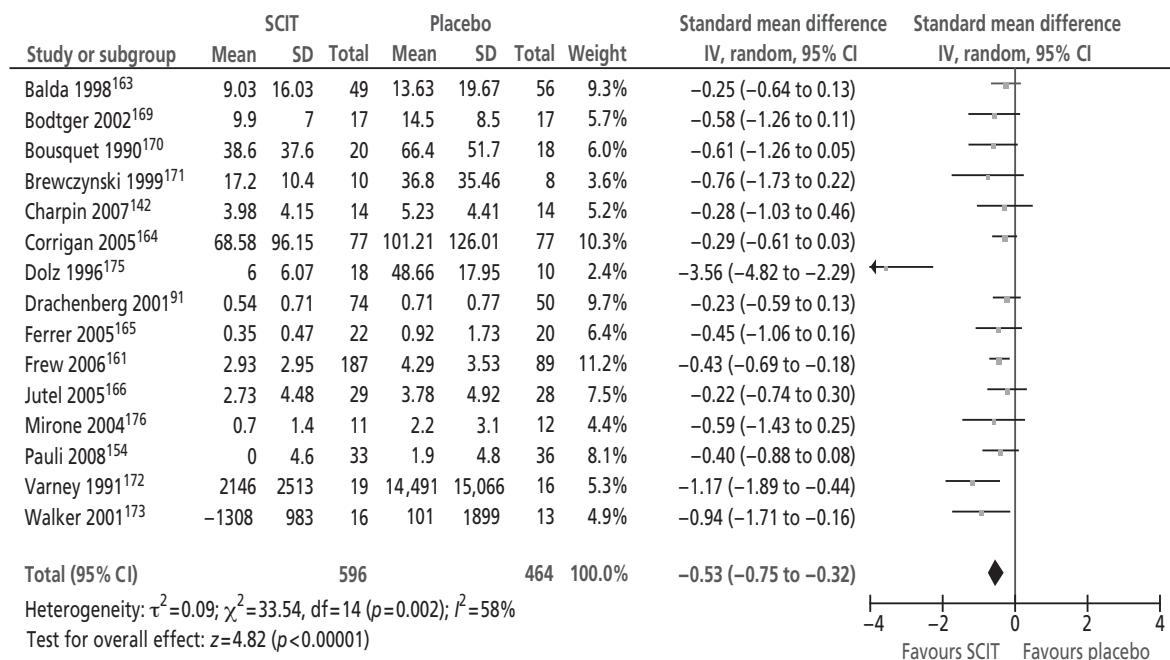


FIGURE 32 Subcutaneous immunotherapy vs placebo, adults, MSs.

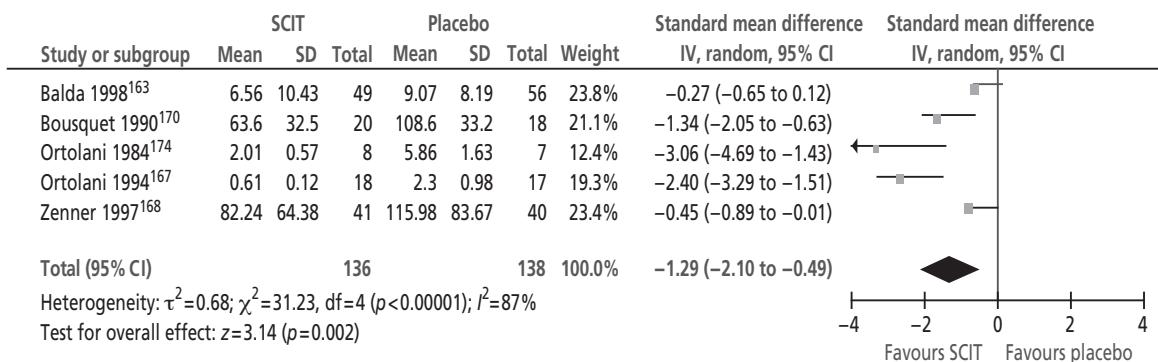


FIGURE 33 Subcutaneous immunotherapy vs placebo, <6 months, SSs.



FIGURE 34 Subcutaneous immunotherapy vs placebo, <6 months, MSs.

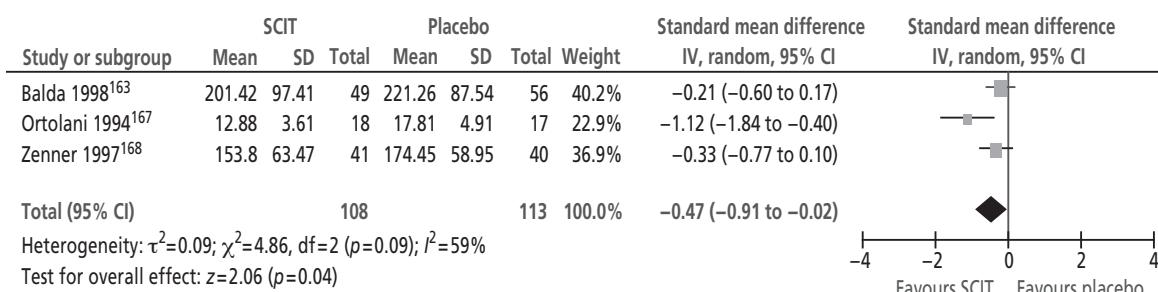


FIGURE 35 Subcutaneous immunotherapy vs placebo, <6 months, SMSs.

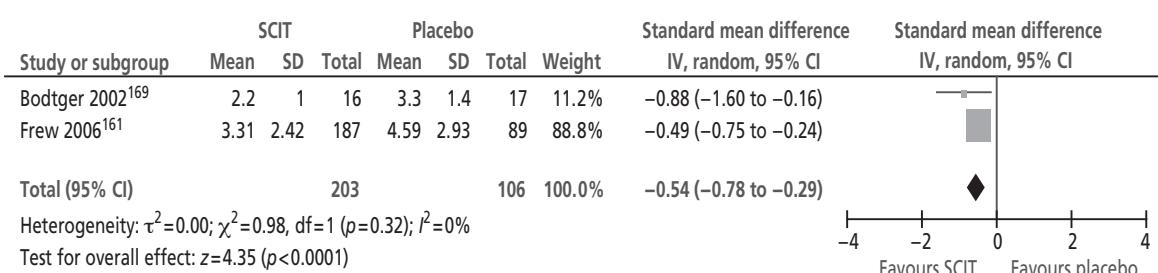


FIGURE 36 Subcutaneous immunotherapy vs placebo, 6–12 months, SSs.

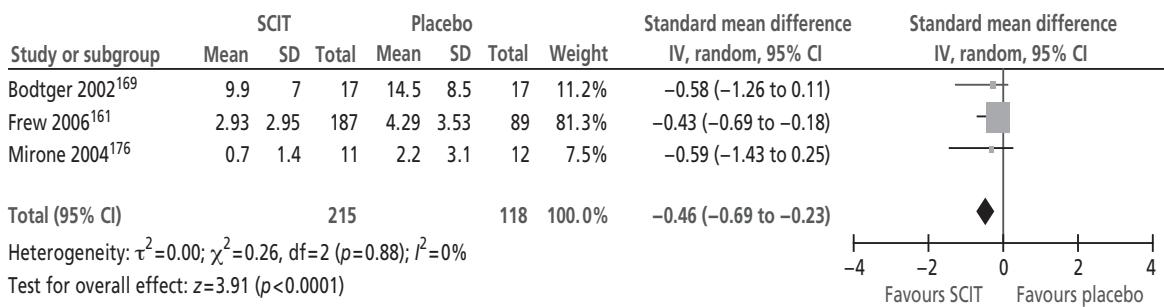


FIGURE 37 Subcutaneous immunotherapy vs placebo, 6–12 months, MSs.

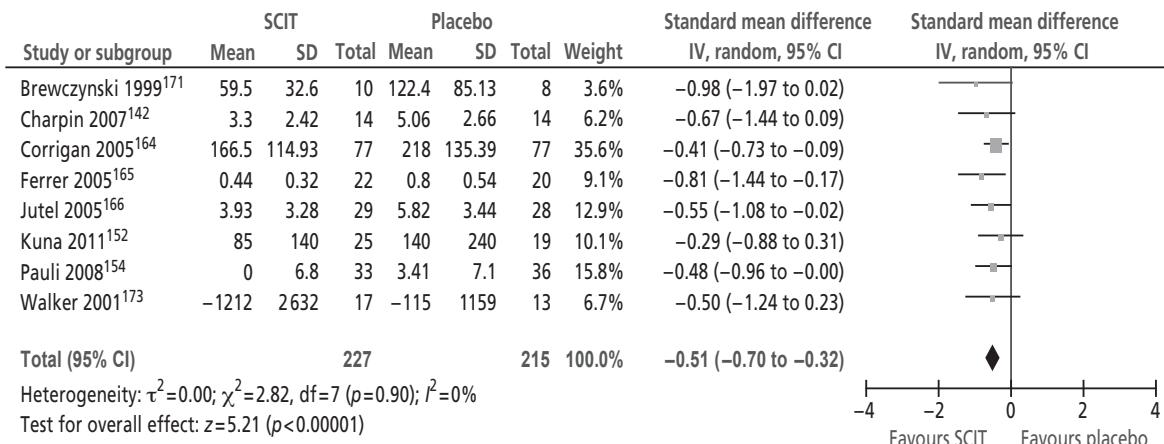


FIGURE 38 Subcutaneous immunotherapy vs placebo, >12 months, SSs.

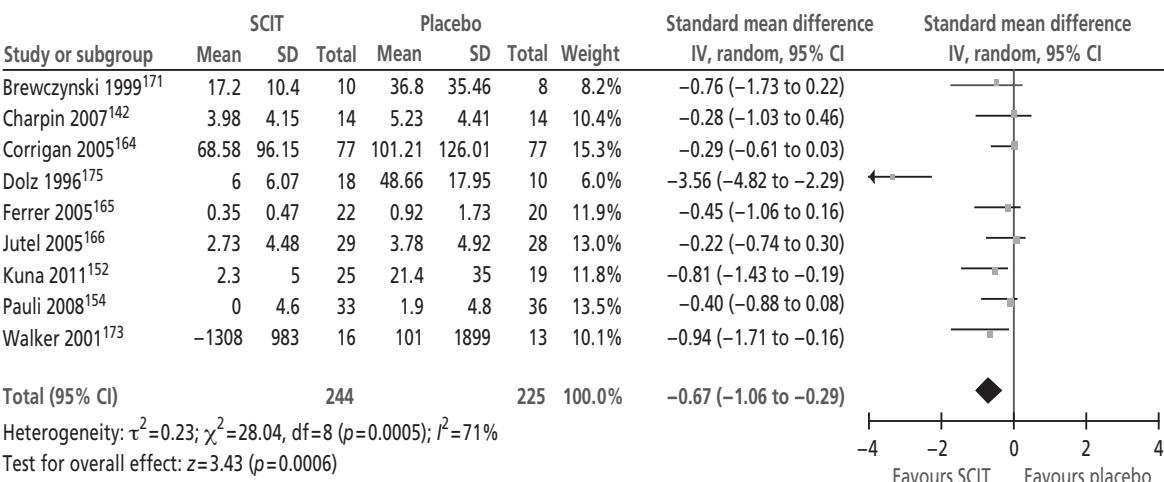


FIGURE 39 Subcutaneous immunotherapy vs placebo, >12 months, MSs.

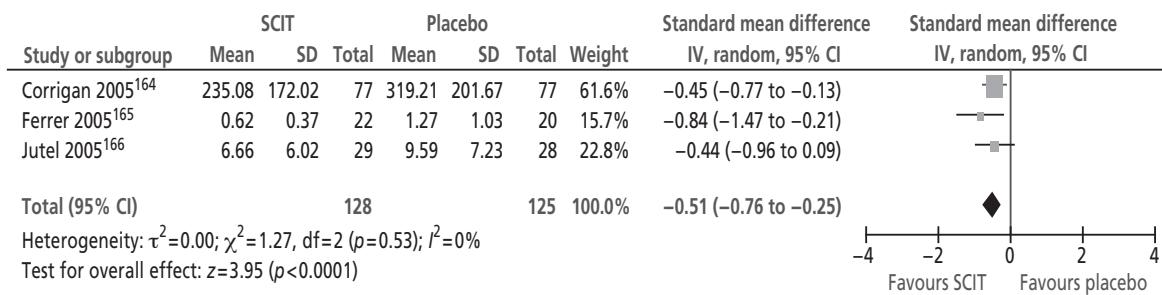


FIGURE 40 Subcutaneous immunotherapy vs placebo, >12 months, SMSs.

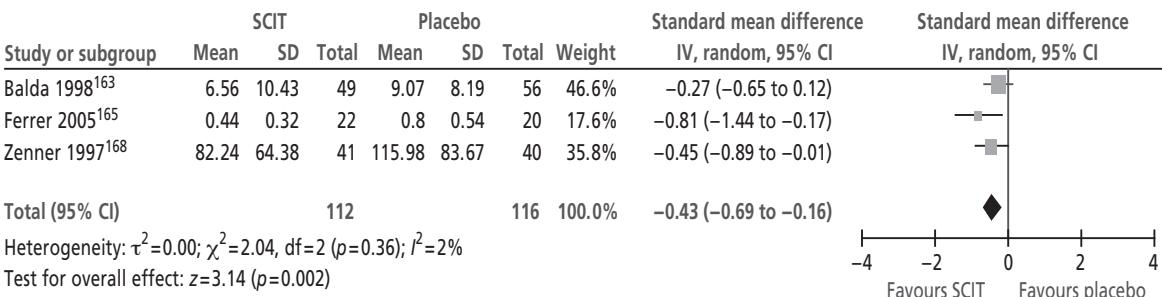


FIGURE 41 Subcutaneous immunotherapy vs placebo, <5 µg, SSs.

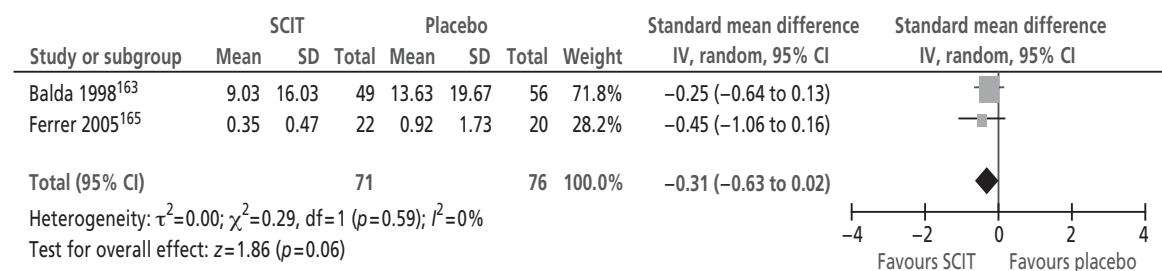


FIGURE 42 Subcutaneous immunotherapy vs placebo, <5 µg, MS.



FIGURE 43 Subcutaneous immunotherapy vs placebo, <5 µg, SMSs.

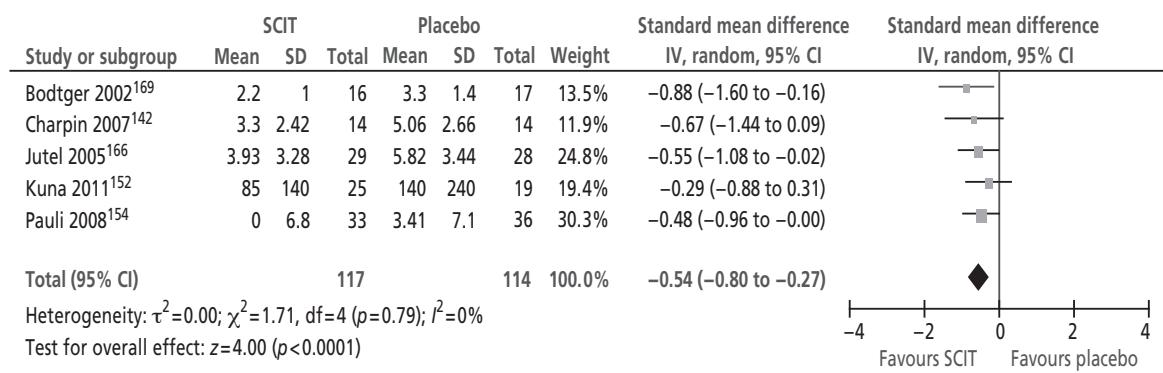


FIGURE 44 Subcutaneous immunotherapy vs placebo, 5–20 µg, SSs.

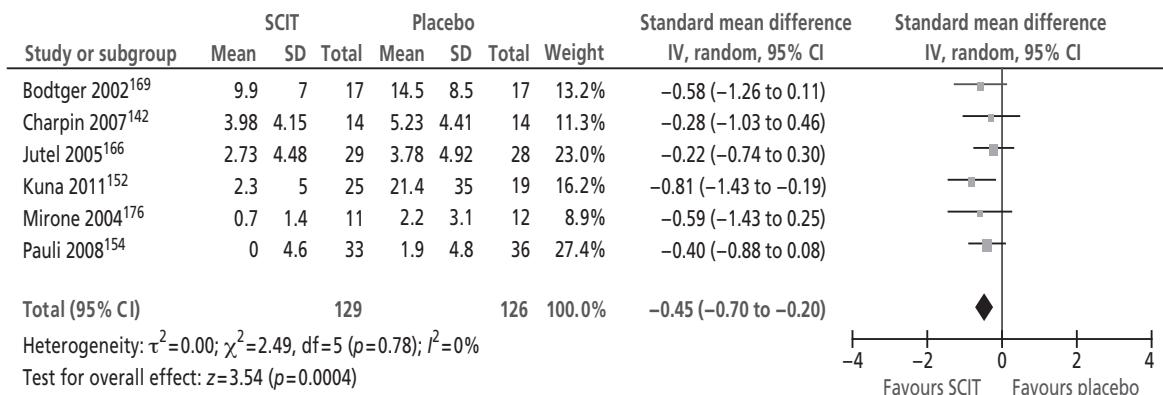


FIGURE 45 Subcutaneous immunotherapy vs placebo, 5–20 µg, MSs.

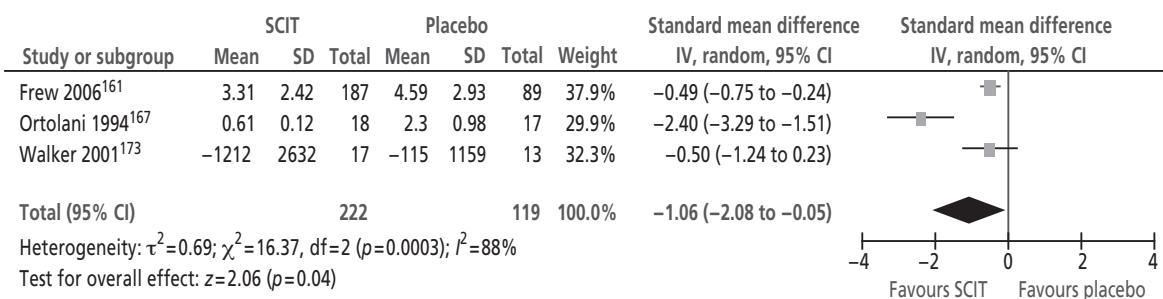


FIGURE 46 Subcutaneous immunotherapy vs placebo, >20 µg, SSs.

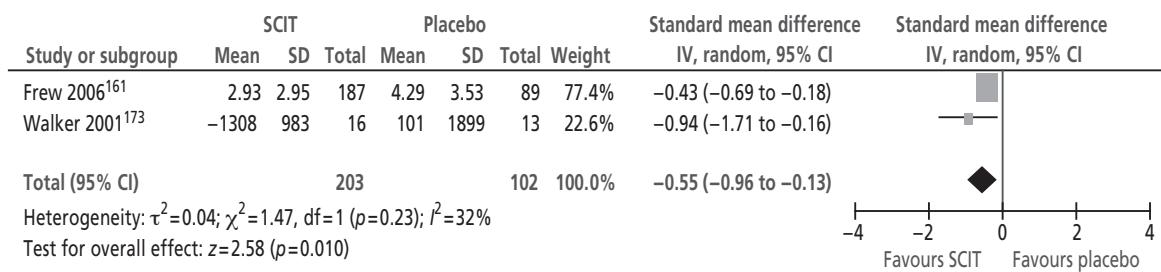


FIGURE 47 Subcutaneous immunotherapy vs placebo, >20µg, MSs.

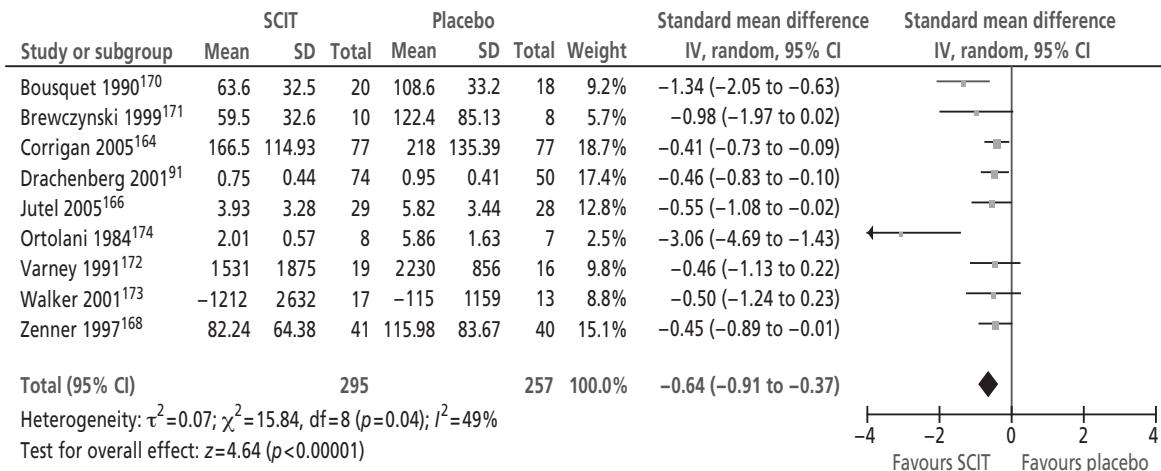


FIGURE 48 Subcutaneous immunotherapy vs placebo, grass pollen, SSs.

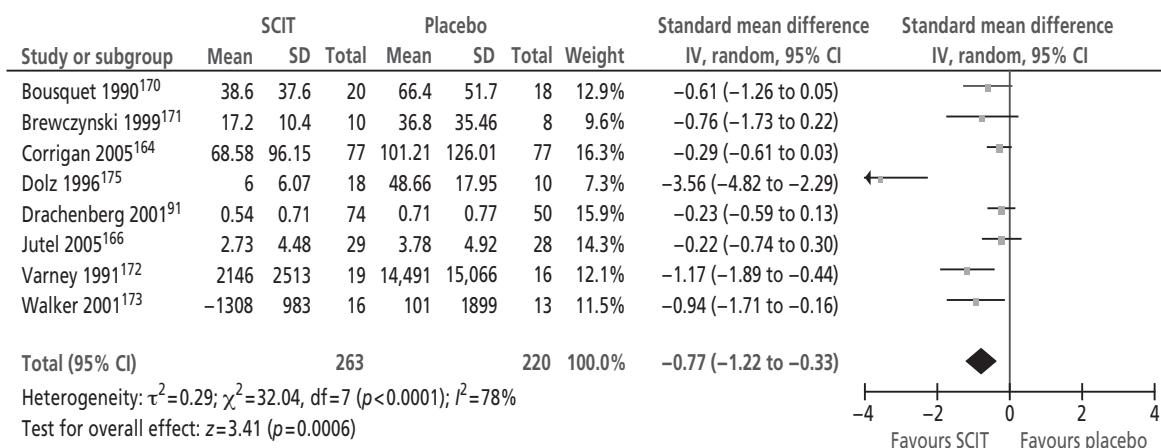


FIGURE 49 Subcutaneous immunotherapy vs placebo, grass pollen, MSs.

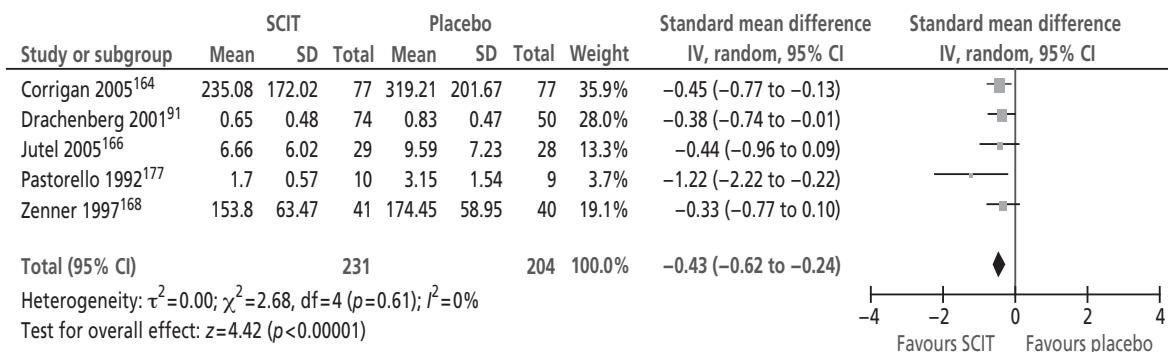


FIGURE 50 Subcutaneous immunotherapy vs placebo, grass pollen, SMSs.

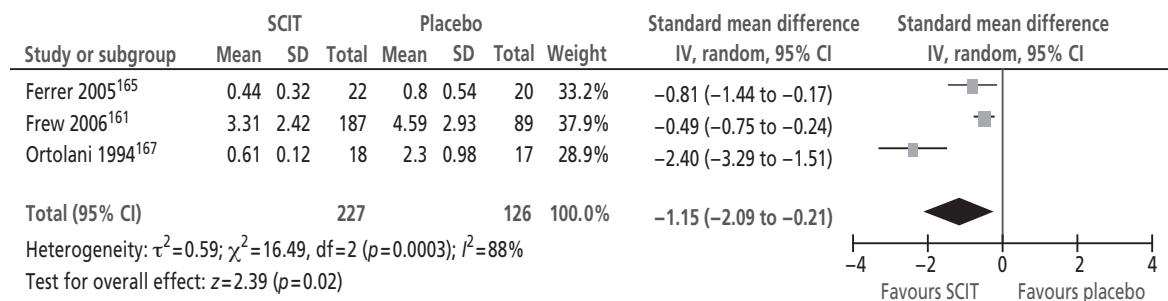


FIGURE 51 Subcutaneous immunotherapy vs placebo, *Parietaria*, SSs.

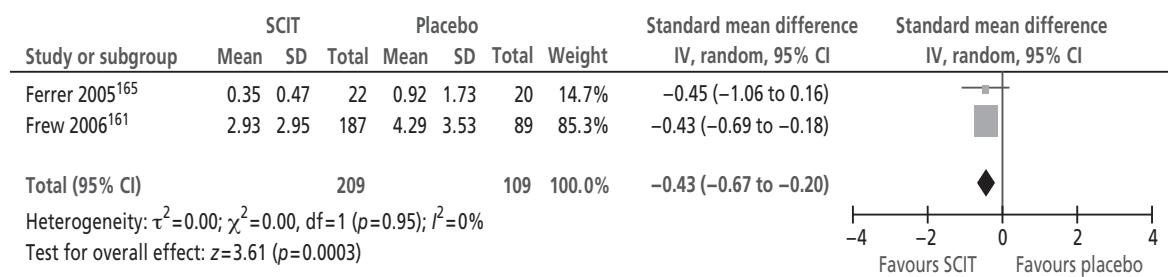


FIGURE 52 Subcutaneous immunotherapy vs placebo, *Parietaria*, MSs.

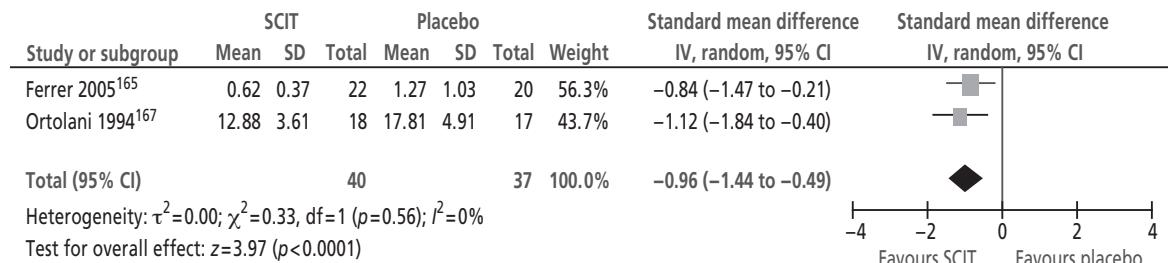


FIGURE 53 Subcutaneous immunotherapy vs placebo, *Parietaria*, SMSs.

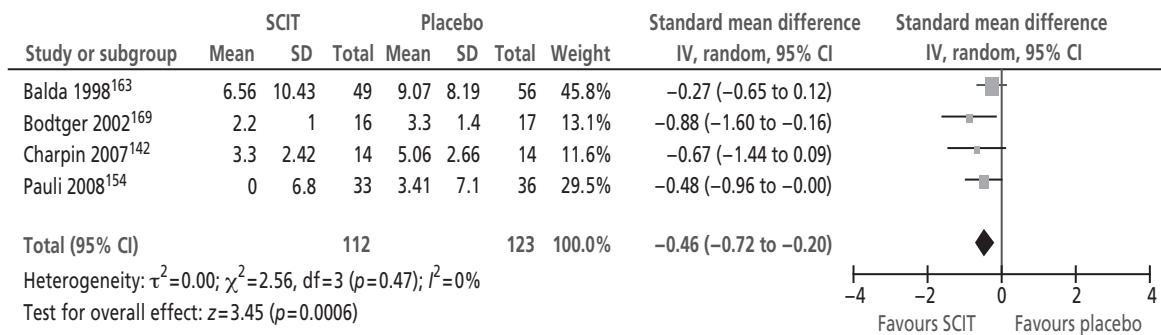


FIGURE 54 Subcutaneous immunotherapy vs placebo, tree pollen, SSs.

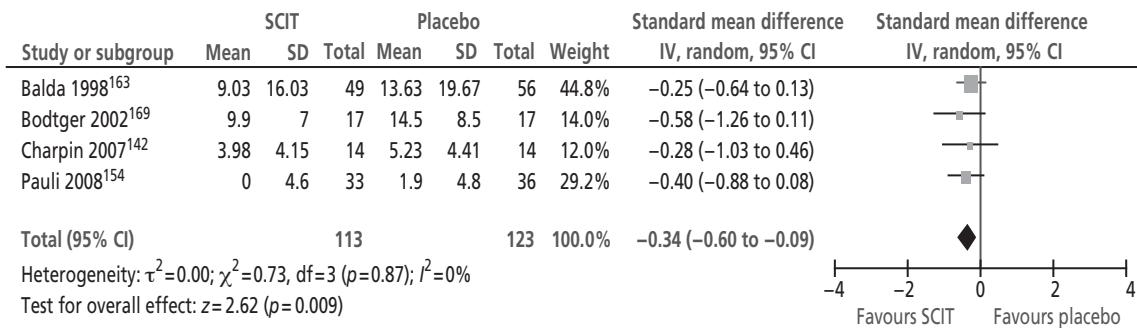


FIGURE 55 Subcutaneous immunotherapy vs placebo, tree pollen, MSs.

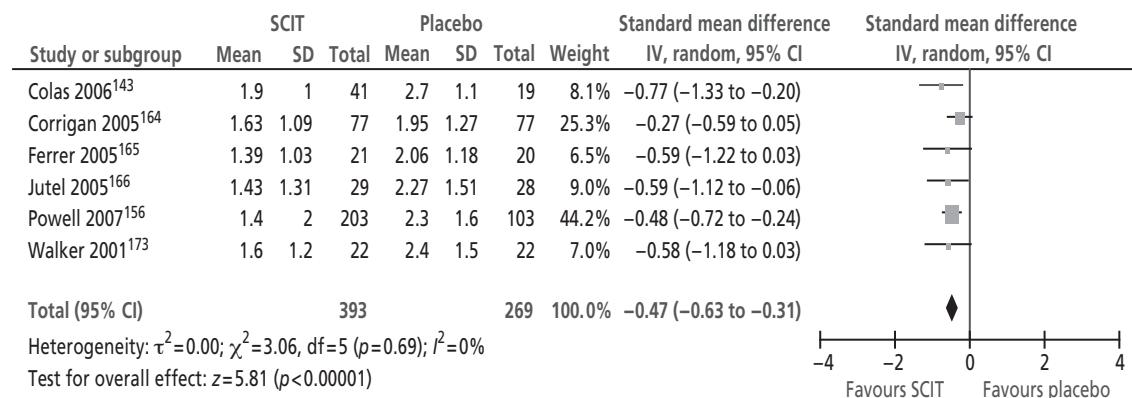


FIGURE 56 Subcutaneous immunotherapy vs placebo, QoL, >12 months.

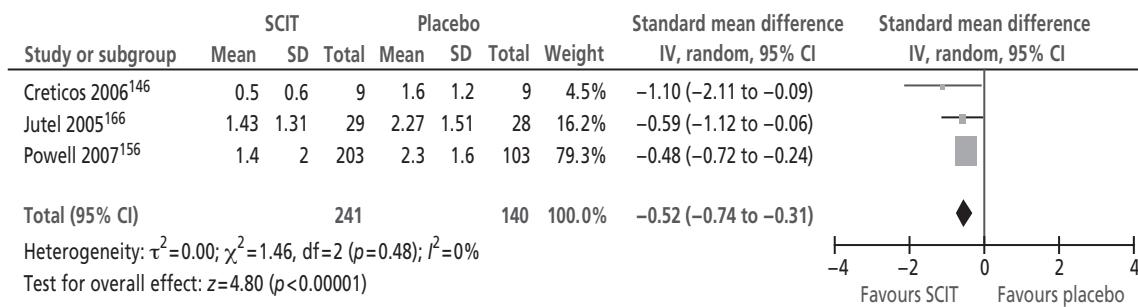


FIGURE 57 Subcutaneous immunotherapy vs placebo, QoL, major allergen content, 5–20 µg.

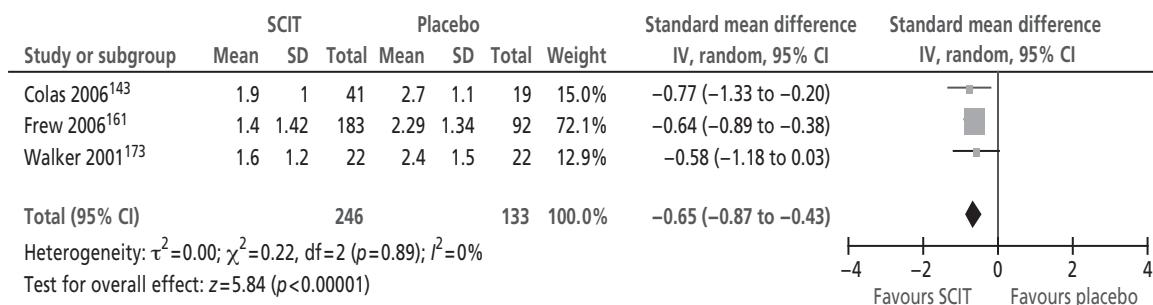


FIGURE 58 Subcutaneous immunotherapy vs placebo, QoL, major allergen content, >20 µg.

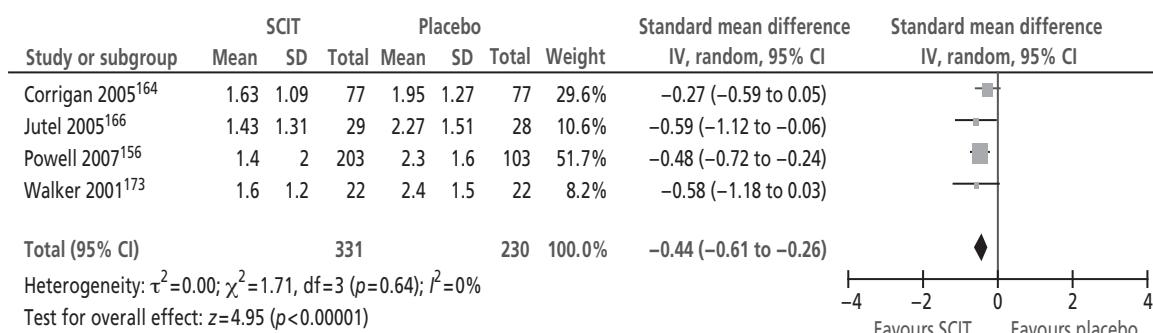


FIGURE 59 Subcutaneous immunotherapy vs placebo, QoL, grass.



FIGURE 60 Subcutaneous immunotherapy vs placebo, QoL, *Parietaria*.

Sublingual immunotherapy

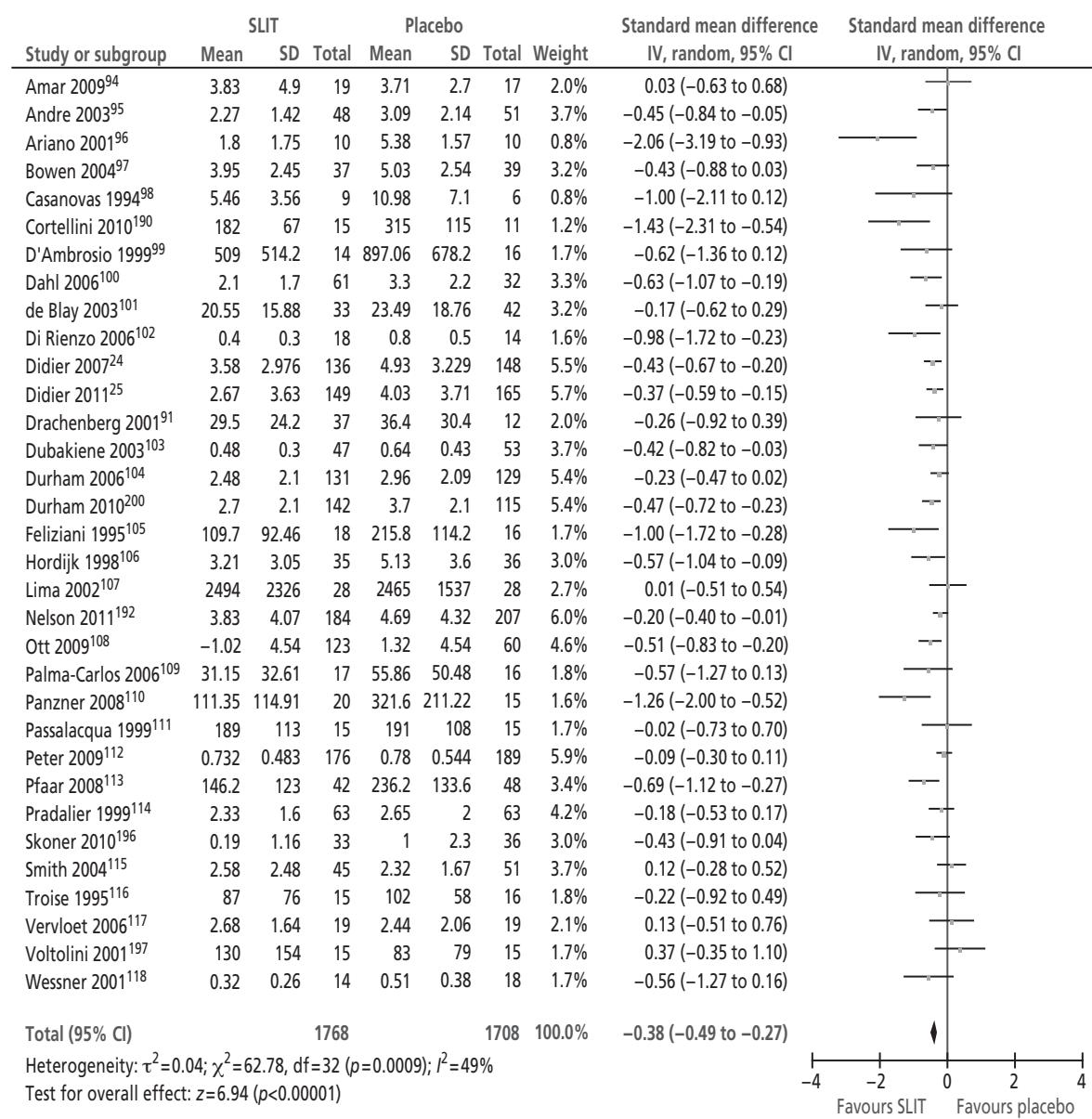


FIGURE 61 Sublingual immunotherapy vs placebo, adults, SSs.

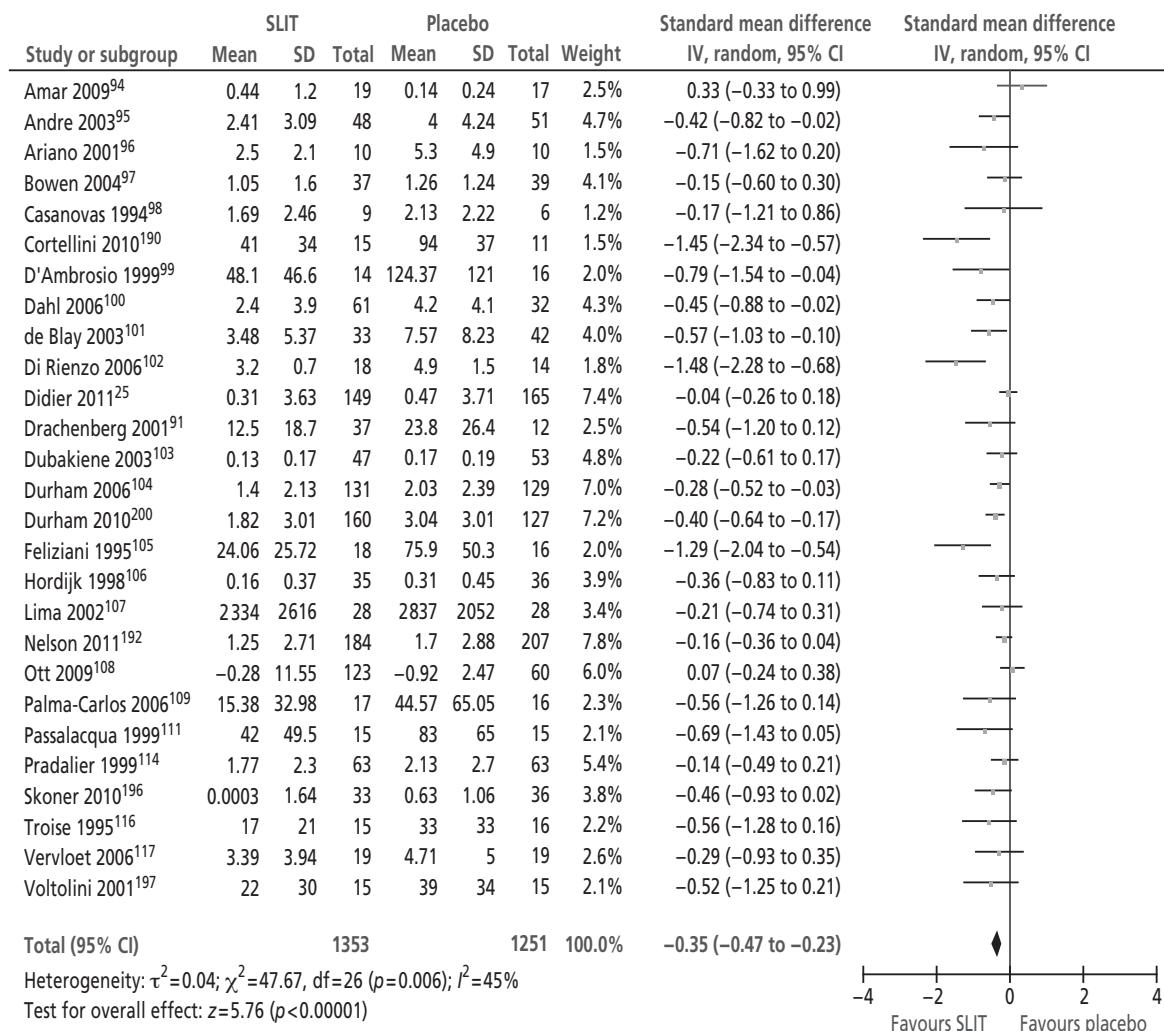


FIGURE 62 Sublingual immunotherapy vs placebo, adults, MSs.

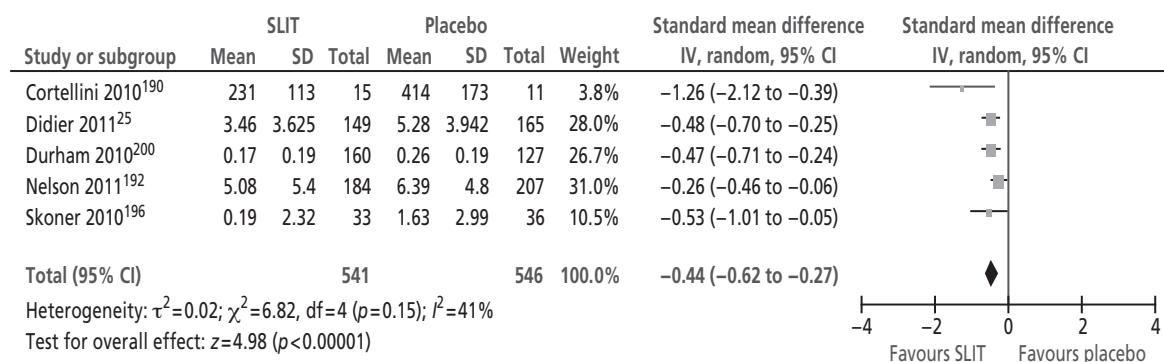


FIGURE 63 Sublingual immunotherapy vs placebo, adults, SMSs.

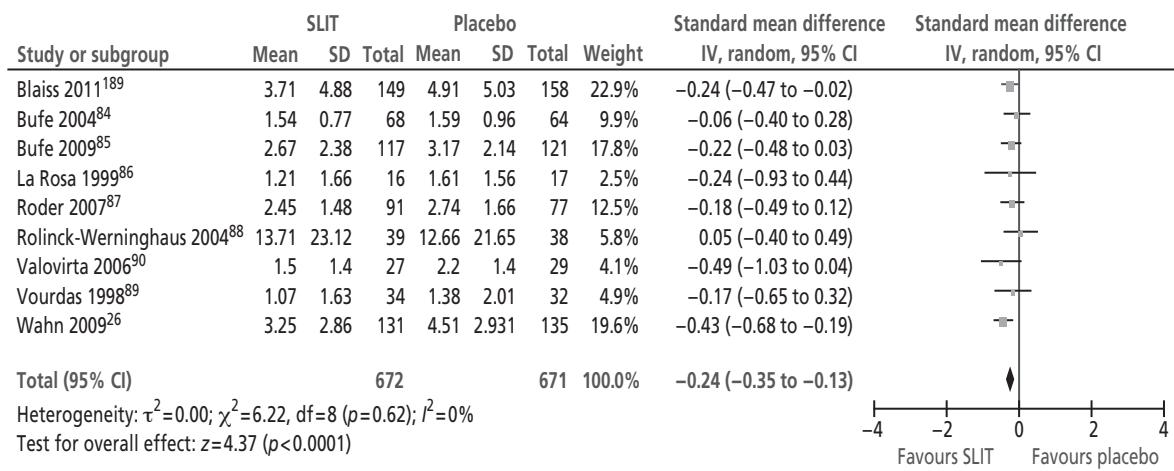


FIGURE 64 Sublingual immunotherapy vs placebo, children, SSs.

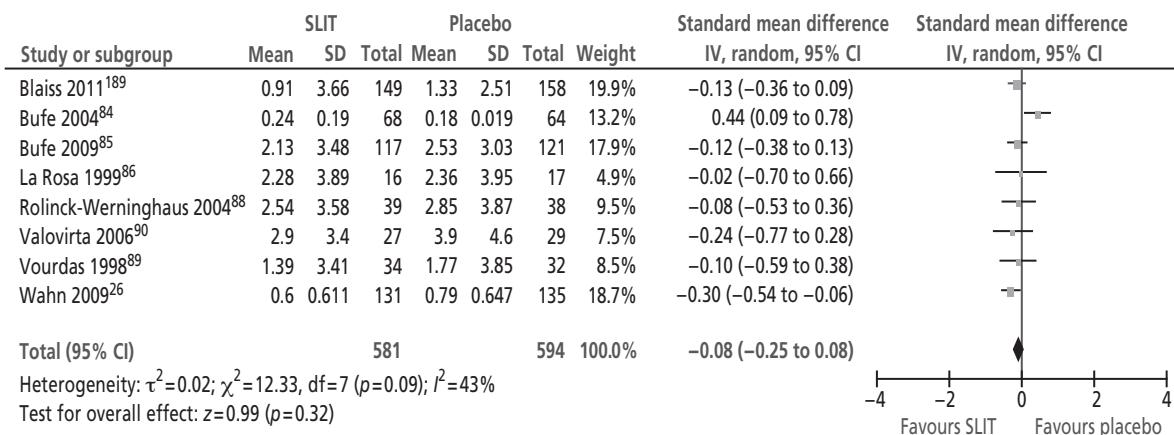


FIGURE 65 Sublingual immunotherapy vs placebo, children, MSs.

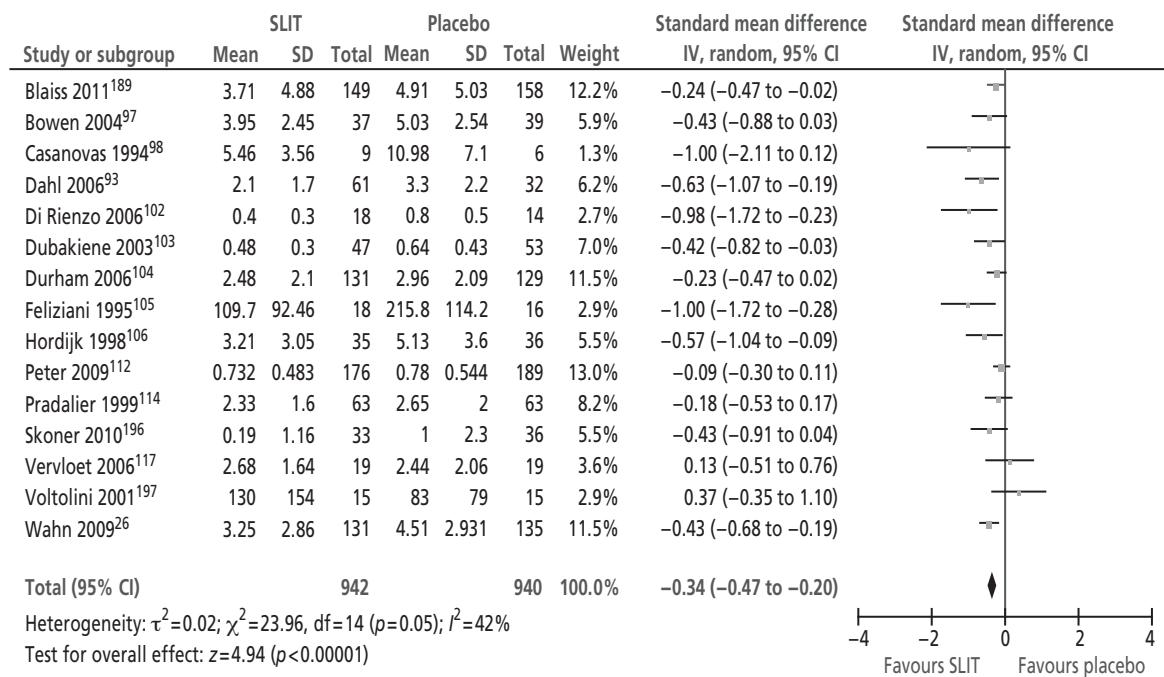


FIGURE 66 Sublingual immunotherapy vs placebo, <6 months, SSs.

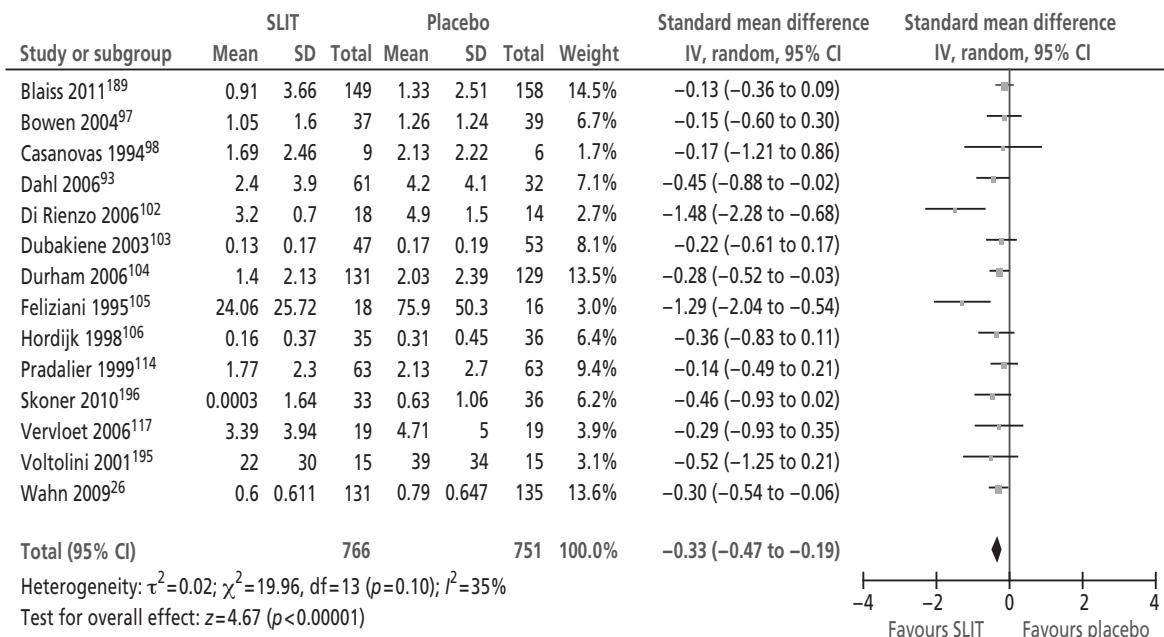


FIGURE 67 Sublingual immunotherapy vs placebo, <6 months, MSs.

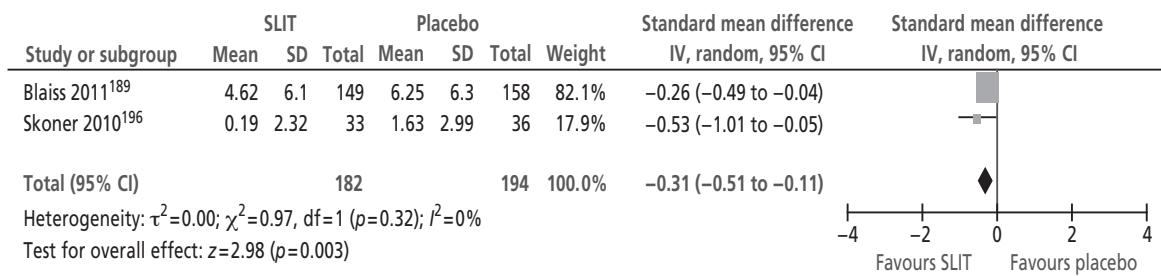


FIGURE 68 Sublingual immunotherapy vs placebo, <6 months, SMSs.

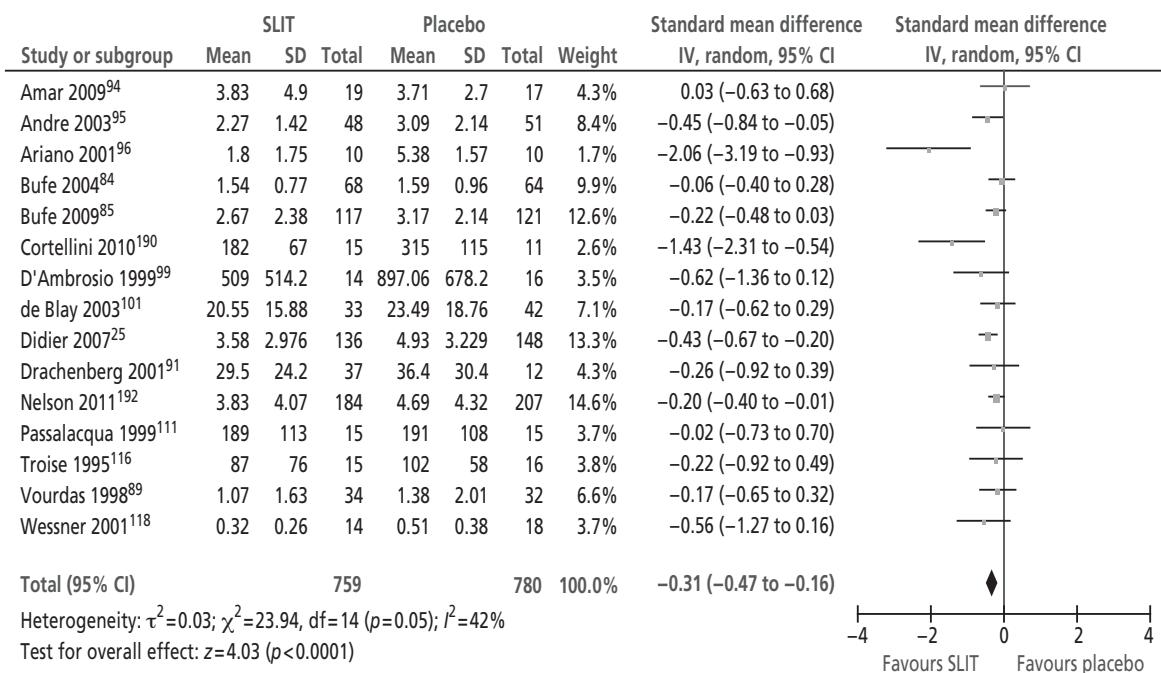


FIGURE 69 Sublingual immunotherapy vs placebo, 6–12 months, SSs.

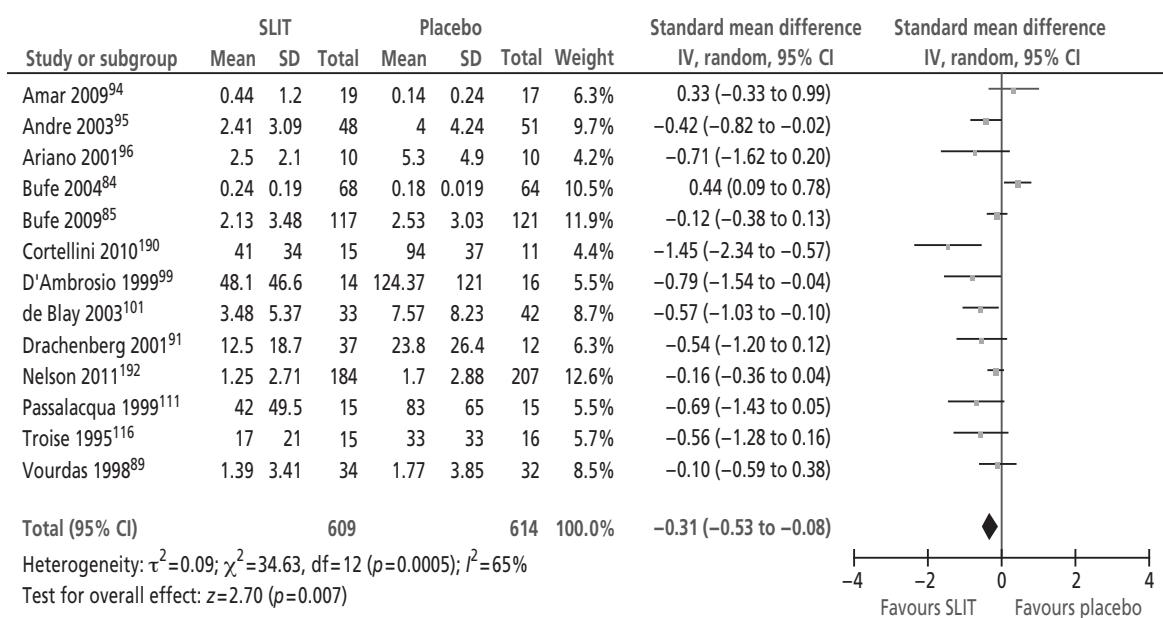


FIGURE 70 Sublingual immunotherapy vs placebo, 6–12 months, MSs.

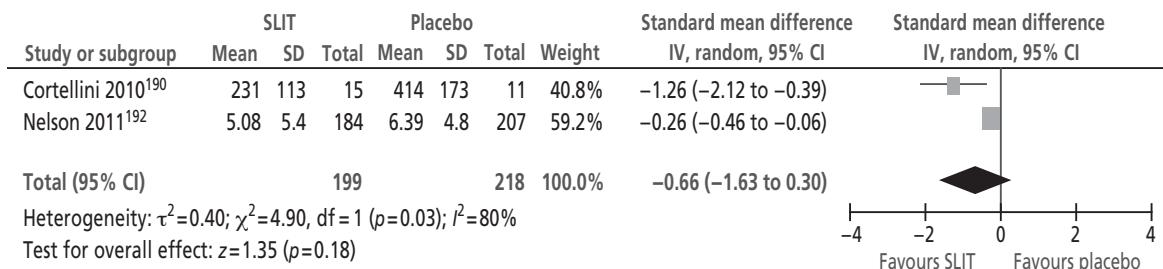


FIGURE 71 Sublingual immunotherapy vs placebo, 6–12 months, SMSs.

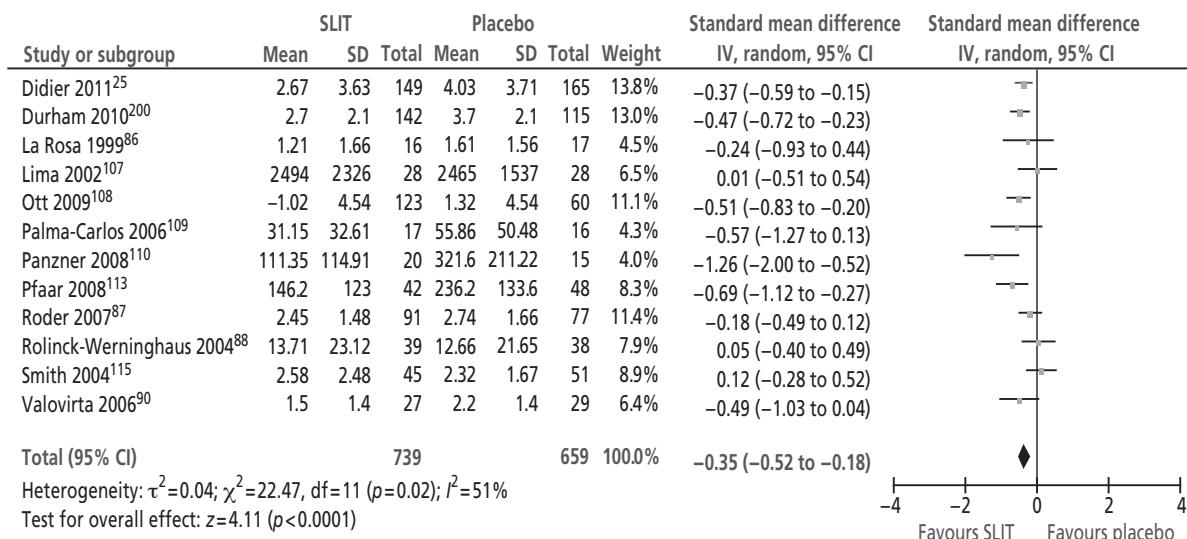


FIGURE 72 Sublingual immunotherapy vs placebo, >12 months, SSs.

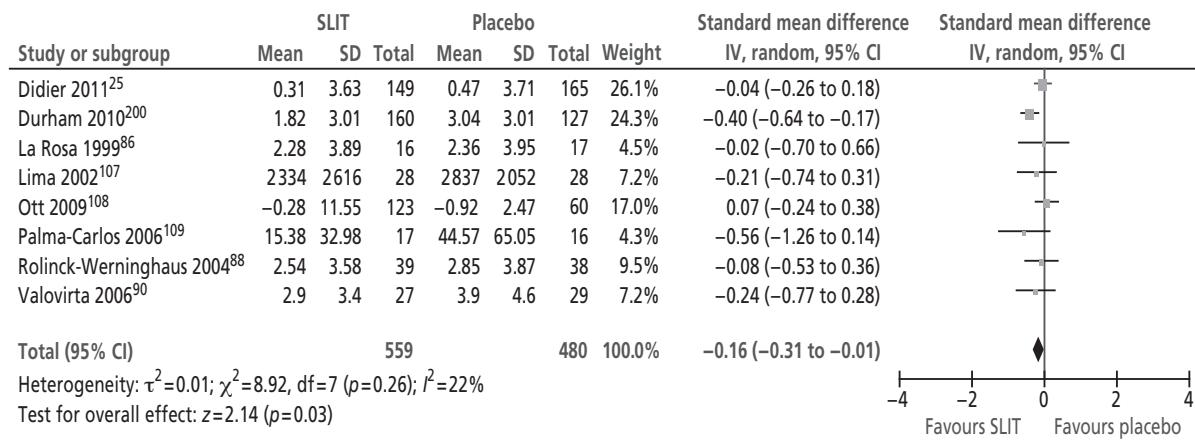


FIGURE 73 Sublingual immunotherapy vs placebo, >12 months, MSs.



FIGURE 74 Sublingual immunotherapy vs placebo, >12 months, SMSs.

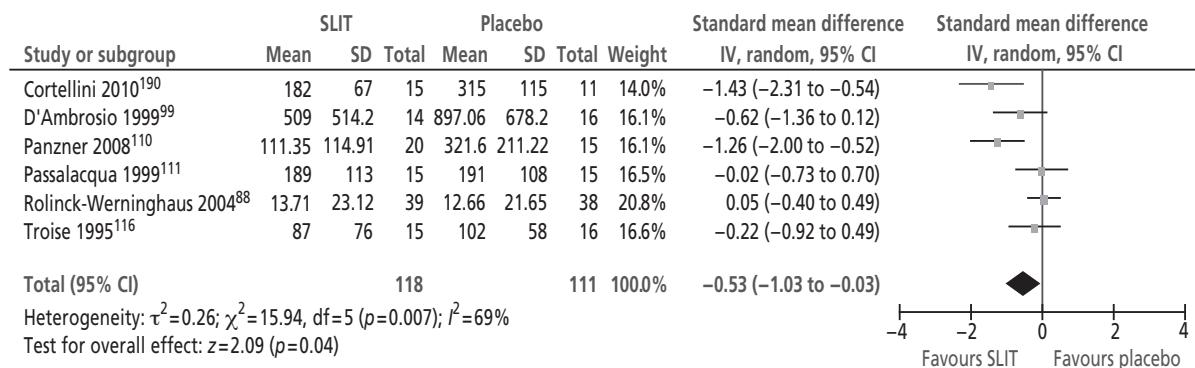


FIGURE 75 Sublingual immunotherapy vs placebo, major allergen content, <5 μ g, SSs.

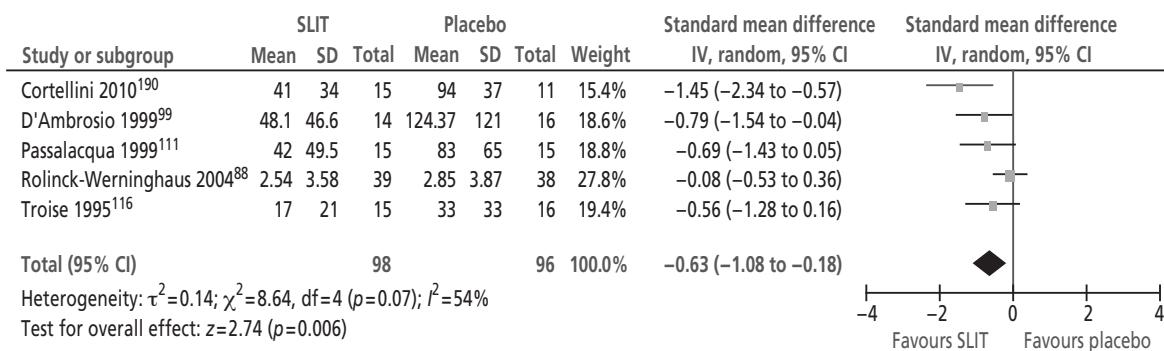


FIGURE 76 Sublingual immunotherapy vs placebo, major allergen content, <5 μ g, MSs.

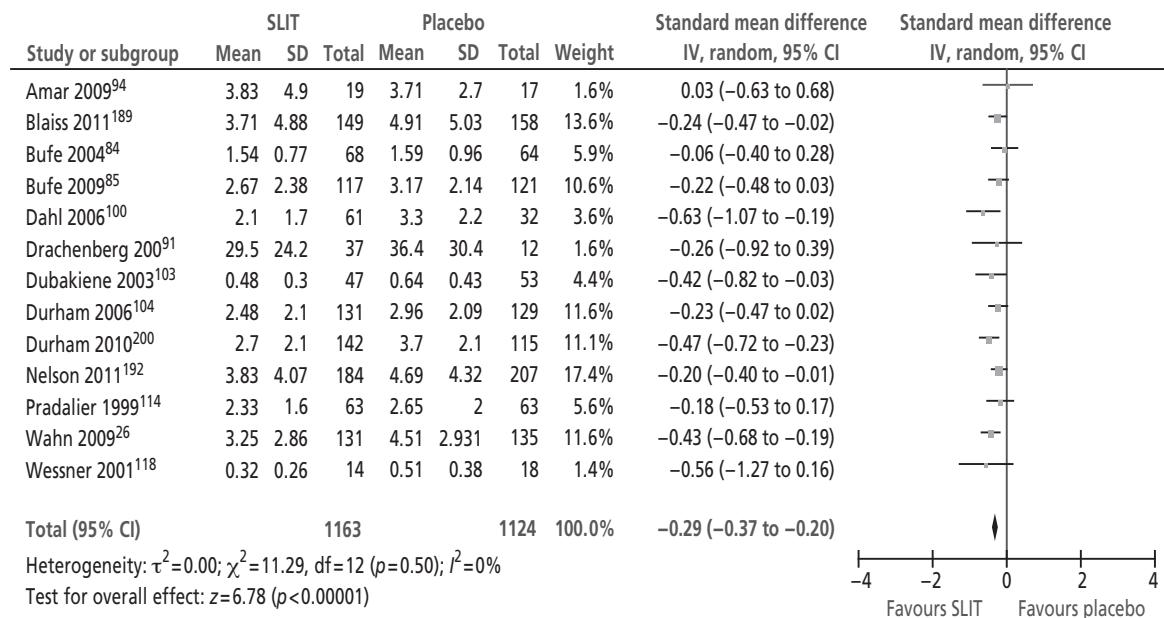


FIGURE 77 Sublingual immunotherapy vs placebo, major allergen content, 5–20 μ g, SSs.

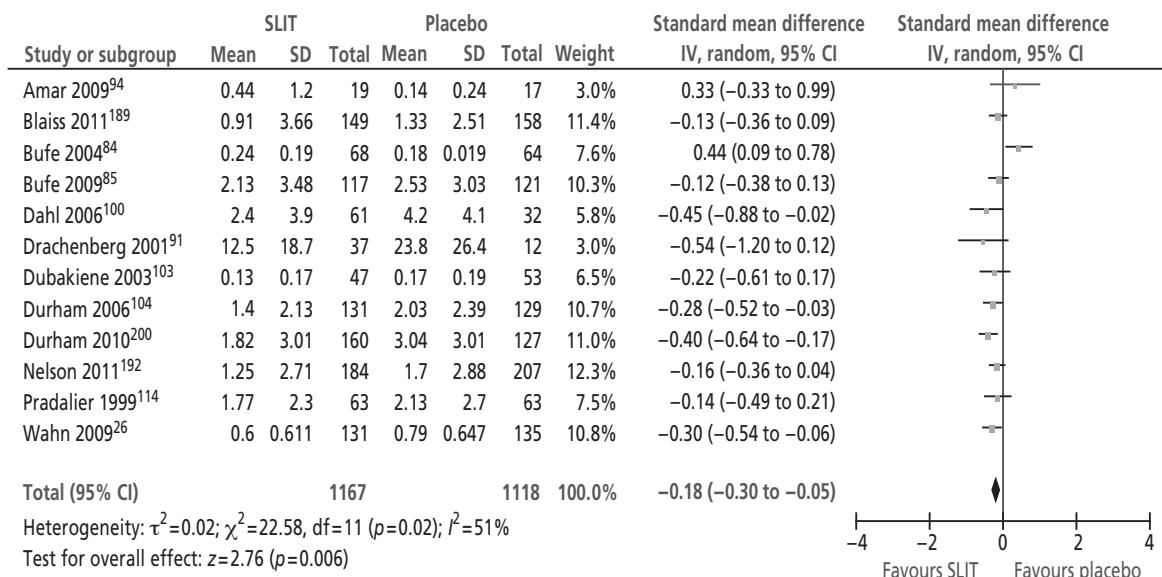


FIGURE 78 Sublingual immunotherapy vs placebo, major allergen content, 5–20 μ g, MSs.

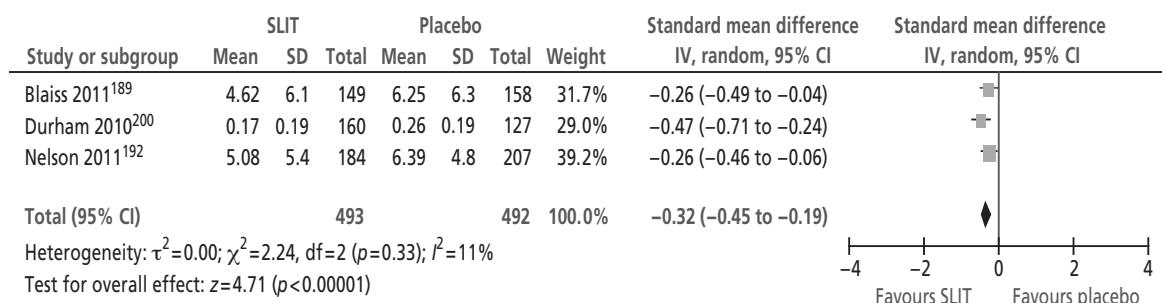


FIGURE 79 Sublingual immunotherapy vs placebo, major allergen content, 5–20 μ g, SMSs.

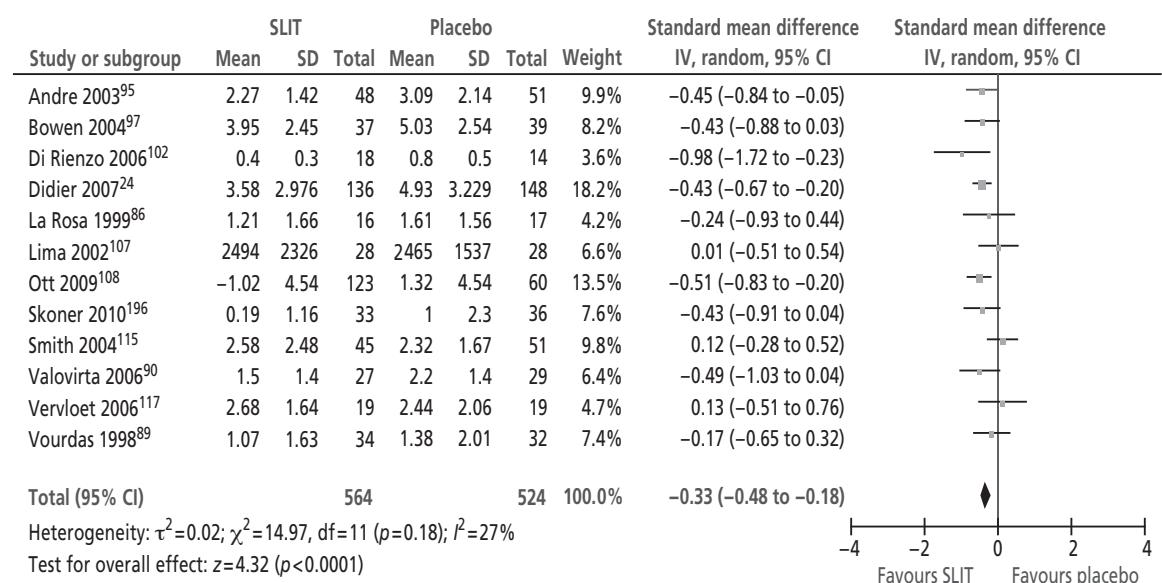


FIGURE 80 Sublingual immunotherapy vs placebo, major allergen content, >20 μ g, SSs.

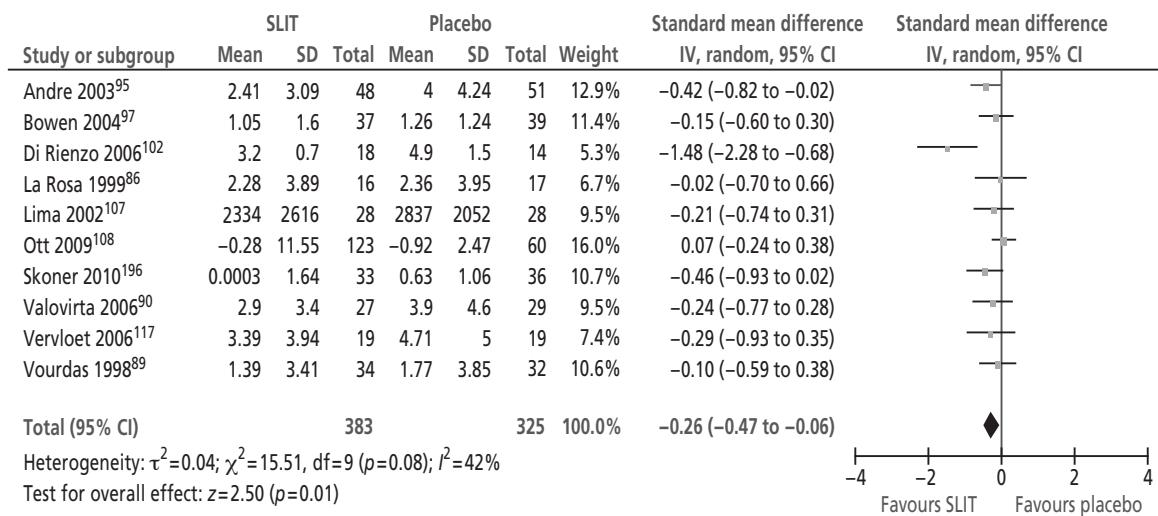


FIGURE 81 Sublingual immunotherapy vs placebo, major allergen content, >20 µg, MSs.

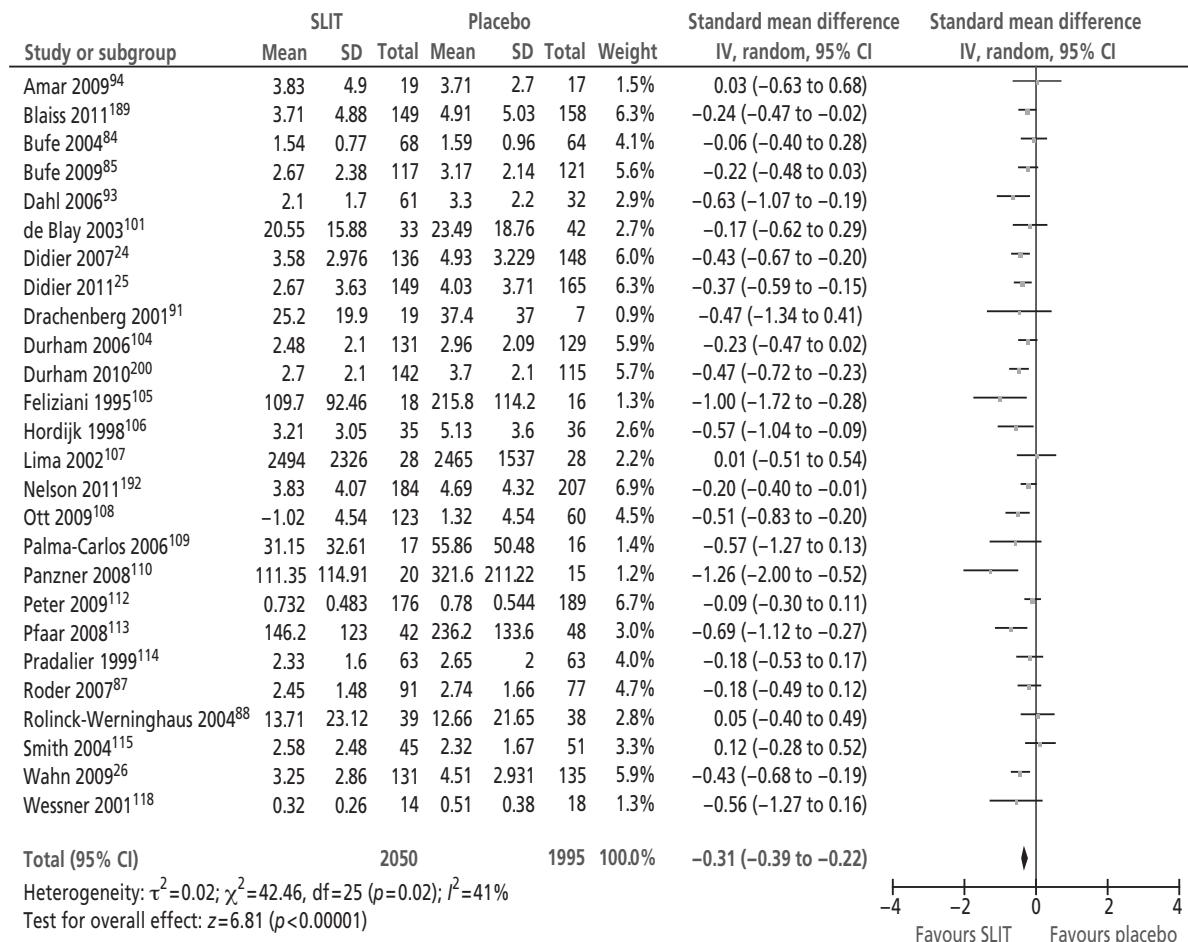


FIGURE 82 Sublingual immunotherapy vs placebo, grass pollen, SSs.

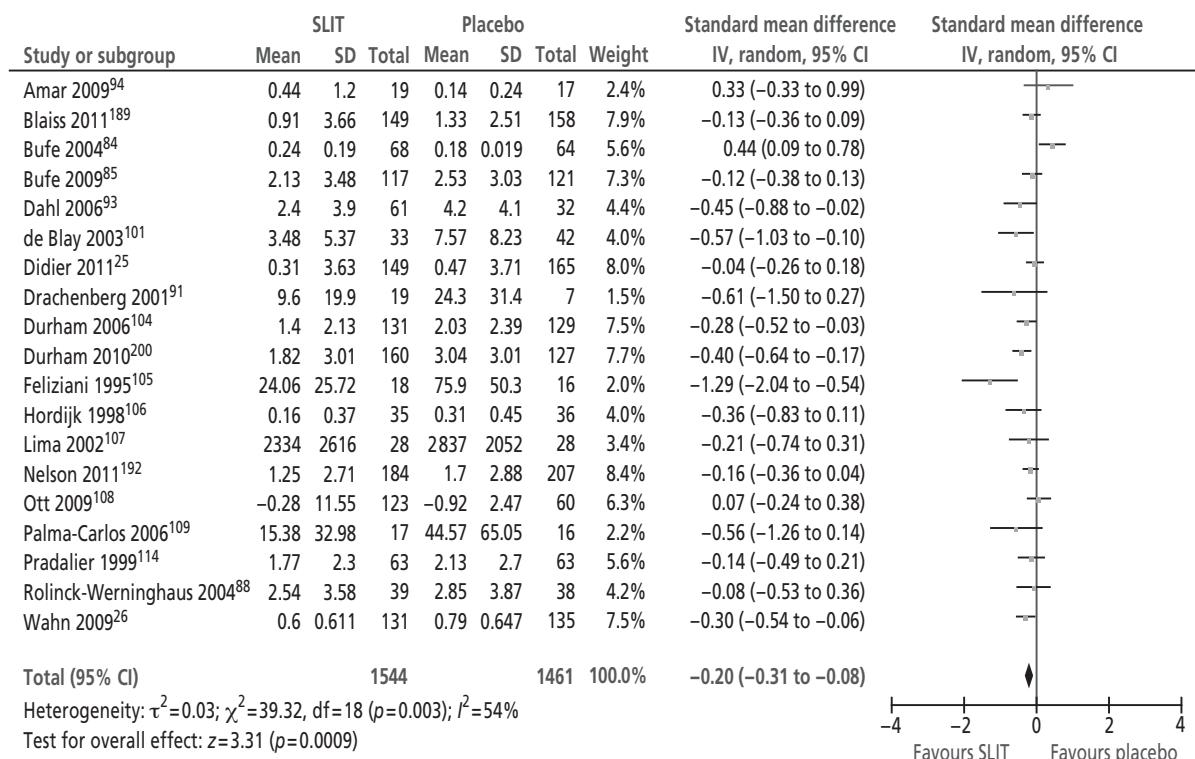


FIGURE 83 Sublingual immunotherapy vs placebo, grass pollen, MSs.

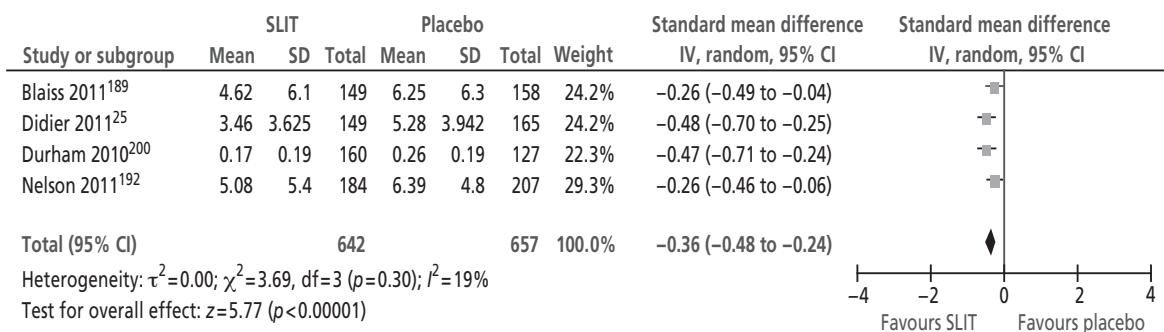


FIGURE 84 Sublingual immunotherapy vs placebo, grass pollen, SMSs.

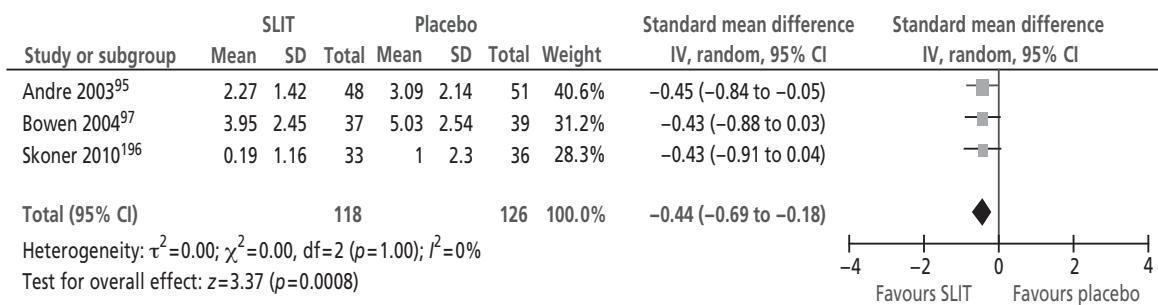


FIGURE 85 Sublingual immunotherapy vs placebo, ragweed, SSs.

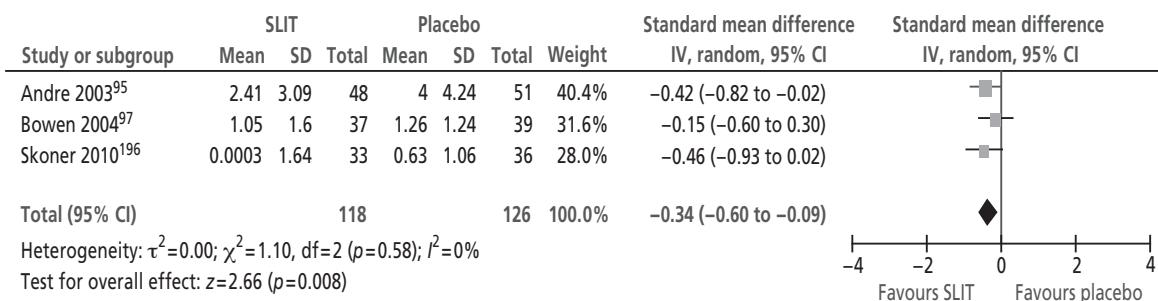


FIGURE 86 Sublingual immunotherapy vs placebo, ragweed, MSs.

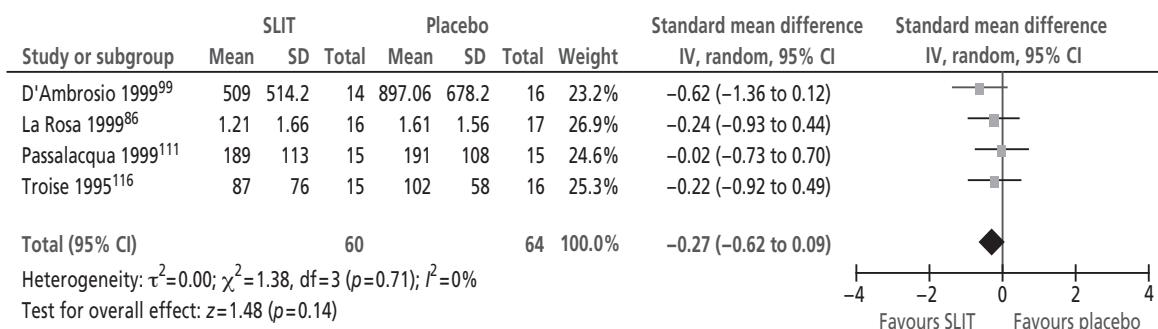


FIGURE 87 Sublingual immunotherapy vs placebo, *Parietaria*, SSs.

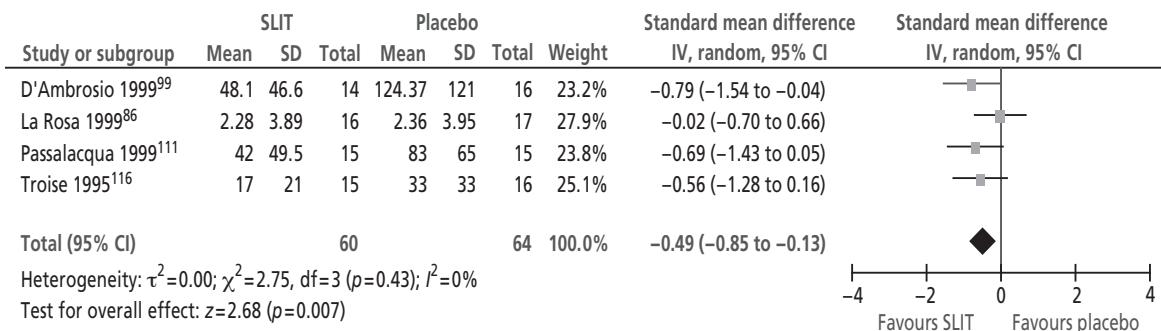


FIGURE 88 Sublingual immunotherapy vs placebo, *Parietaria*, MSs.

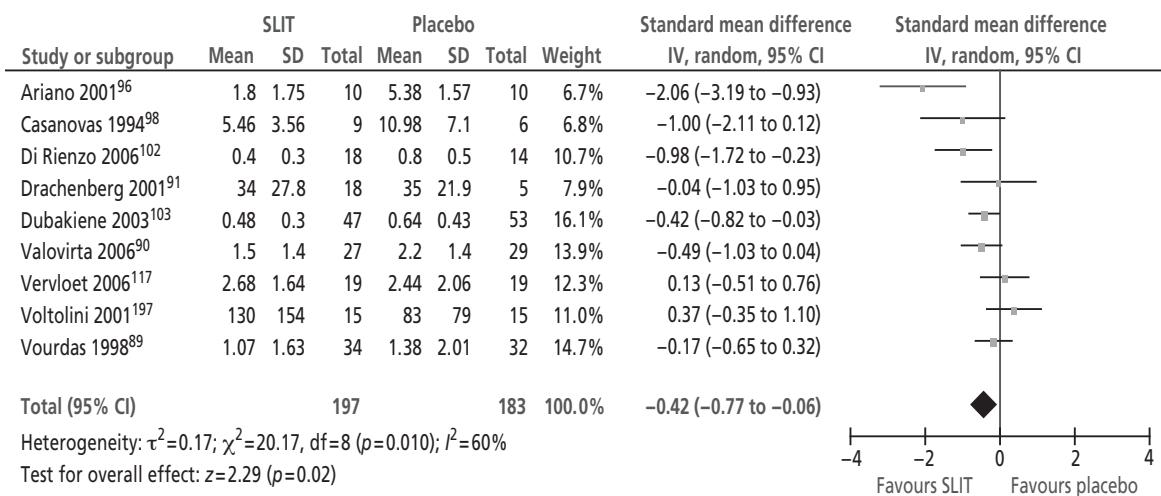


FIGURE 89 Sublingual immunotherapy vs placebo, tree, SSs.

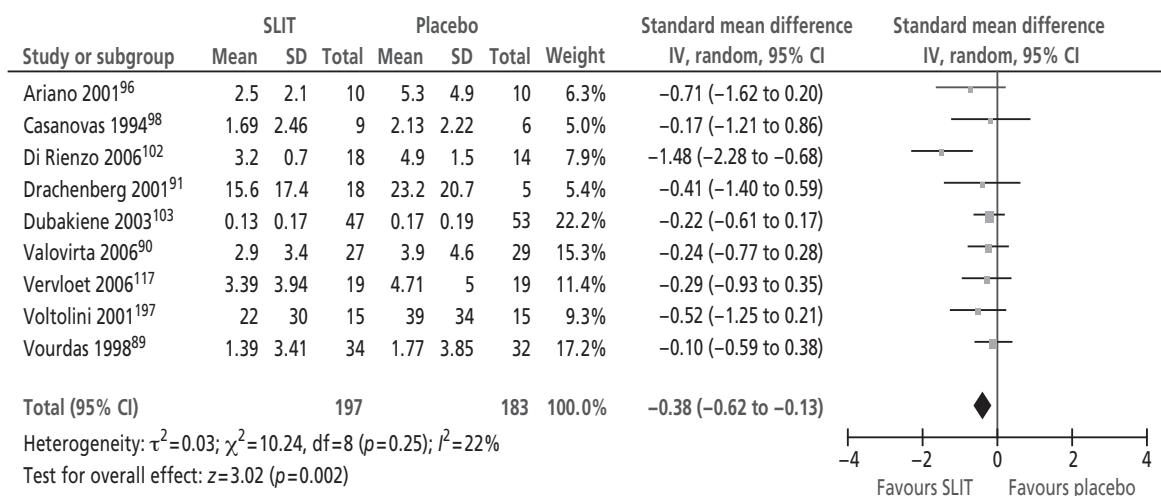


FIGURE 90 Sublingual immunotherapy vs placebo, tree, MSs.

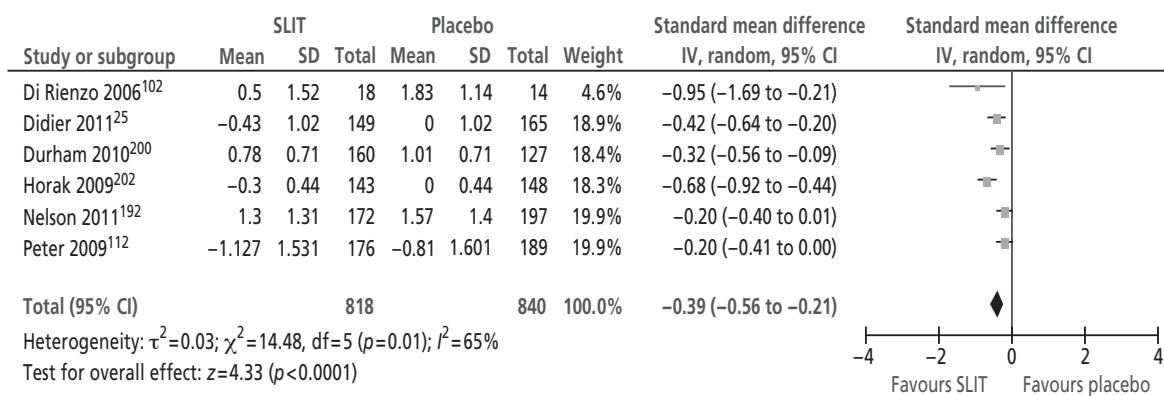


FIGURE 91 Sublingual immunotherapy vs placebo, QoL, adults.

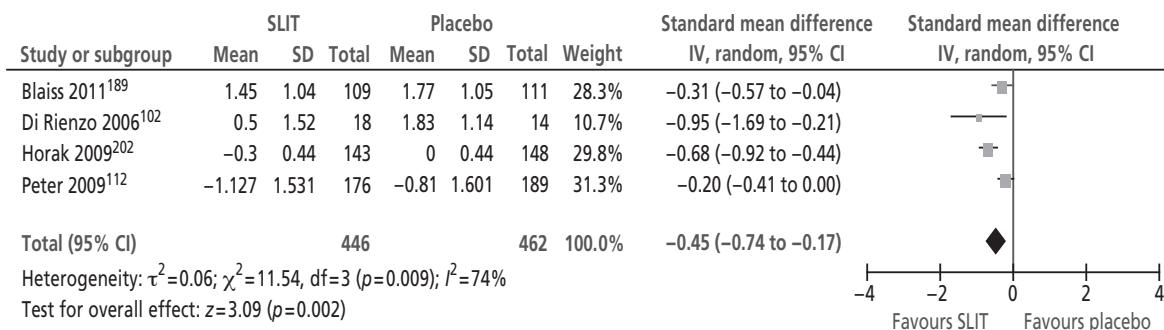


FIGURE 92 Sublingual immunotherapy vs placebo, QoL, <6 months.

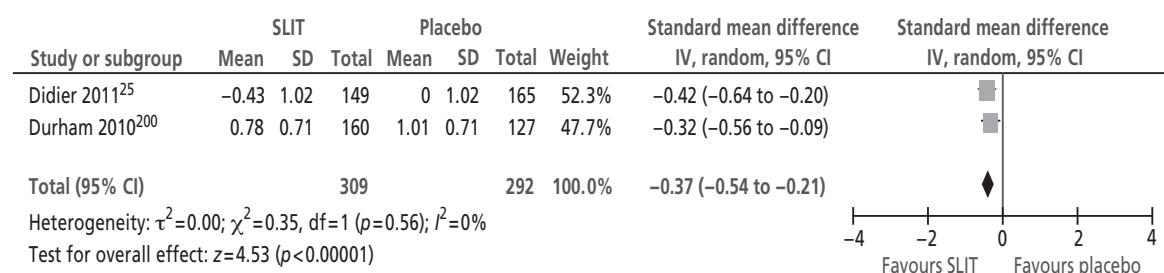


FIGURE 93 Sublingual immunotherapy vs placebo, QoL, >12 months.

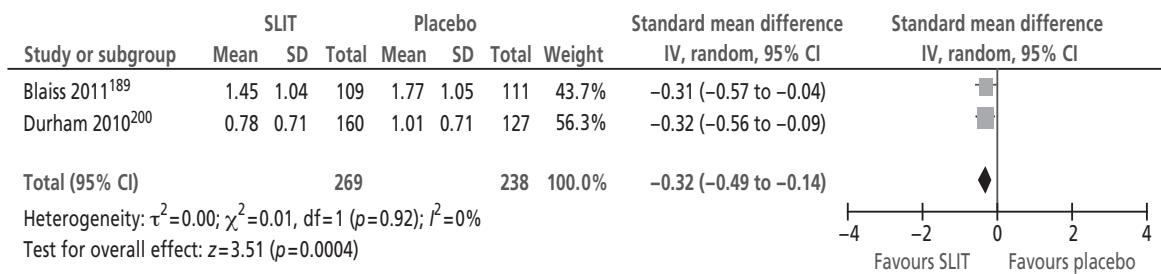


FIGURE 94 Sublingual immunotherapy vs placebo, QoL, major allergen content, 5–20 μ g.

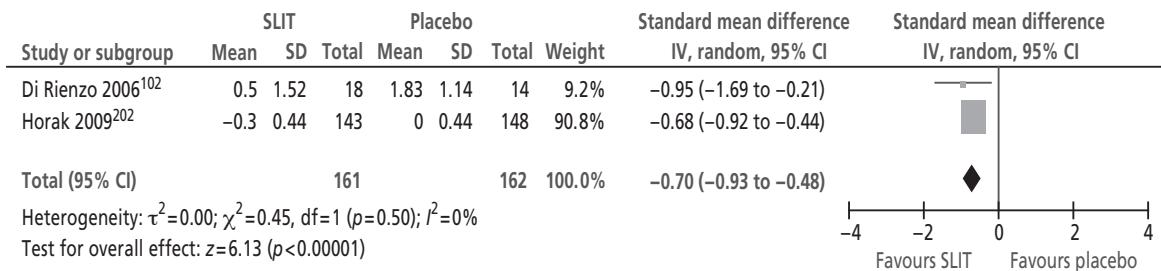


FIGURE 95 Sublingual immunotherapy vs placebo, QoL, major allergen content, >20 μ g.