Supplementary Tables:

**Table E1 in the Online Repository: Comparison of baseline characteristics between attendees and non-attendees at 12-year and at 18-year follow-up in MACS and at 15-year follow-up in LISAplus.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **MACS** | | | | | | |  | **LISAplus** | | |
|  |  |  | **At 12 years** | | |  | **At 18 years** | | |  | **At 15 years** | | |
|  |  |  | Attendees  N=366 | Non-attendees  N= 254 | *P\** value |  | Attendees  N= 404 | Non-attendees  N= 216 | *P\** value |  | Attendees  N=991 | Non-attendees  N=2103 | *P*\* value |
| **Sex** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male |  |  | 194 (53) | 123 (48) | 0.26 |  | 206 (51) | 111 (51) | 0.91 |  | 512 (52) | 1072 (51) | 0.75 |
| Female |  |  | 172 (47) | 131 (52) |  |  | 198 (49) | 105 (49) |  |  | 479 (48) | 1031 (49) |  |
| **Parental education** | |  |  |  |  |  |  |  |  |  |  |  |  |
| Maternal higher education | | | 228 (62) | 137 (54) | **0.03** |  | 260 (64) | 105 (49) | **<0.01** |  | 536 (54) | 1015 (49) | **<0.01** |
| Paternal higher education | | | 225 (62) | 153 (60) | 0.70 |  | 265 (66) | 113 (52) | **<0.01** |  | 576 (61) | 1047 (54) | **<0.01** |
| **Number of older siblings** | | |  |  |  |  |  |  |  |  |  |  |  |
| No siblings | |  | 139 (38) | 110 (43) | 0.18 |  | 163 (40) | 86 (40) | 0.89 |  | 532 (54) | 1207 (58) | **0.01** |
| 1 |  |  | 118 (32) | 82 (32) |  |  | 129 (32) | 71 (33) |  |  | 365(37) | 664 (32) |  |
| ≥2 |  |  | 109 (30) | 62 (24) |  |  | 112 (28) | 59 (27) |  |  | 93 (9) | 226 (11) |  |
| **History of atopic diseases in siblings** | | | |  |  |  |  |  |  |  |  |  |  |
| Food allergy | |  | 140 (38) | 92 (36) | 0.6 |  | 155 (38) | 77 (36) | 0.50 |  | 25 (3) | 69 (3) | 0.29 |
| Asthma |  |  | 135 (37) | 84 (33) | 0.32 |  | 141 (35) | 78 (36) | 0.76 |  | 5 (1) | 23 (1) | 0.15 |
| Eczema |  |  | 144 (39) | 94 (37) | 0.55 |  | 155 (38) | 83 (38) | 0.98 |  | 78 (8) | 166 (8) | 1.00 |
| Hay fever |  |  | 84 (23) | 51 (20) | 0.39 |  | 90 (22) | 45 (21) | 0.67 |  | 17 (2) | 47 (2) | 0.41 |
| **History of maternal atopic diseases** | | | |  |  |  |  |  |  |  |  |  |  |
| Food allergy | |  | 137 (37) | 102 (40) | 0.49 |  | 155 (38) | 84 (39) | 0.89 |  | 86 (9) | 173 (8) | 0.73 |
| Asthma |  |  | 159 (43) | 109 (43) | 0.89 |  | 169 (42) | 99 (46) | 0.33 |  | 64 (7) | 131 (6) | 0.88 |
| Eczema |  |  | 150 (41) | 91 (36) | 0.19 |  | 158 (39) | 83 (38) | 0.86 |  | 87 (9) | 217 (10) | 0.19 |
| Hay fever |  |  | 212 (58) | 163 (64) | 0.11 |  | 242 (60) | 133 (62) | 0.60 |  | 279 (29) | 611 (30) | 0.50 |
| **History of paternal atopic diseases** | | | |  |  |  |  |  |  |  |  |  |  |
| Food allergy | |  | 79 (22) | 52 (21) | 0.73 |  | 78 (19) | 53 (25) | 0.12 |  | 63 (7) | 111 (6) | 0.40 |
| Asthma |  |  | 99 (27) | 59 (23) | 0.28 |  | 110 (28) | 48 (22) | 0.17 |  | 48 (5) | 115 (6) | 0.40 |
| Eczema |  |  | 72 (20) | 54 (21) | 0.61 |  | 85 (21) | 41 (19) | 0.54 |  | 46 (5) | 106 (6) | 0.50 |
| Hay fever |  |  | 172 (47) | 112 (44) | 0.47 |  | 188 (47) | 96 (44) | 0.61 |  | 260 (28) | 524 (28) | 0.97 |
| **Early food and aeroallergens sensitisation** | | | |  |  |  |  |  |  |  |  |  |  |
| Food\_6M |  |  | 71 (21) | 53 (24) | 0.32 |  | 79 (22) | 45 (23) | 0.66 |  | NA | NA |  |
| Food\_12M | |  | 84 (24) | 61 (30) | 0.11 |  | 97 (26) | 48 (27) | 0.76 |  | NA | NA |  |
| Food\_24M | |  | 61 (20) | 30 (21) | 0.79 |  | 71 (22) | 20 (15) | 0.06 |  | 87 (10) | 117 (9) | 0.47 |
| Aero\_6M |  |  | 37 (11) | 23 (11) | 0.92 |  | 37 (10) | 23 (12) | 0.52 |  | NA | NA |  |
| Aero\_12M | |  | 64 (18) | 38 (19) | 0.89 |  | 69 (18) | 33 (19) | 0.95 |  | NA | NA |  |
| Aero\_24M | |  | 93 (30) | 38 (26) | 0.41 |  | 96 (30) | 35 (26) | 0.35 |  | 40 (5) | 63 (5) | 0.89 |

\*From Pearson’s Chi-squared test.

**Table E2 in the Online Repository: Associations between atopic sensitisation in the first two years and FEV1 (pre and post-BD) at 12, 15 and 18 years**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **FEV1 pre-BD (ml)** | | | | | | | | | | | |
|  |  | **12 Years**  **(MACS)** | | | **15 Years**  **(LISAplus)** | | | | **18 Years**  **(MACS)** | | | |
| **Atopic sensitisation** | **N (%)** | **Adj.**  **Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** | **N (%)** | **Adj. Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** | **N (%)** | **Adj.**  **Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** |
| **6 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No | 254 (74) | 2371 | **-** | **-** |  |  |  |  | 276 (74) | 3872 | **-** | **-** |
| Food only | 51 (15) | 2222 | -149 (-252, -46)  **<0.01** | -149 (-251, -47)  **<0.01** |  |  |  |  | 59 (16) | 3668 | -197 (-339, -56)  **<0.01** | -208 (-349, -66)  **<0.01** |
| Aero only | 17 (5) | 2513 | 142 (-27, 310)  0.10 | 144 (-25, 312)  0.10 |  |  |  |  | 15 (4) | 3995 | 59 (-202, 321)  0.44 | 45 (-217, 306)  0.73 |
| Food and Aero | 20 (6) | 2353 | -19 (-174, 137)  0.81 | -17 (-173, 137)  0.82 |  |  |  |  | 23 (6) | 3866 | 3 (-212, 218)  0.97 | 14 (-201, 230)  0.89 |
| **12 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No | 236 (68) | 2382 | **-** | **-** |  |  |  |  | 255 (67) | 3872 | **-** | **-** |
| Food only | 47 (13) | 2251 | -131 (-241, -21)  **0.02** | -135 (-247, -24)  **0.01** |  |  |  |  | 55 (14) | 3716 | -158 (-306, -11)  **0.03** | -149 (-297, -1)  **0.04** |
| Aero only | 26 (7) | 2301 | -81 (-224, 61)  0.26 | -83 (-226, 60)  0.25 |  |  |  |  | 27 (7) | 3793 | -65 (-266, 137)  0.52 | -80 (-281, 122)  0.43 |
| Food and Aero | 40 (12) | 2382 | -0.3 (-118, 118)  0.99 | -6 (-124, 112)  0.91 |  |  |  |  | 44 (12) | 3883 | 6 (-175, 168)  0.94 | 10 (-152, 172)  0.90 |
| **24 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No | 195 (62) | 2346 | **-** | **-** | 681 (88) | 3520 |  |  | 198 (61) | 3885 | **-** | **-** |
| Food only | 24 (8) | 2277 | -70 (-214, 74)  0.33 | -81 (-227, 64)  0.27 | 61 (8) | 3533 | 17 (-93, 128) 0.76 | 13 (-98, 123) 0.82 | 28 (9) | 3805 | -99 (-300, 103)  0.33 | -109 (-313, 96)  0.29 |
| Aero only | 53 (17) | 2258 | -89 (-192, 14)  0.09 | -90 (-194, 14)  0.08 | 17 (2) | 3293 | -221 (-424, -18) **0.03** | -208 (-410, -5) **0.04** | 56 (17) | 3714 | -151 (-302, -0.3)  **0.05** | -158 (-310, -6)  **0.04** |
| Food and Aero | 40 (13) | 2287 | -59 (-174, 56)  0.31 | -78 (-194, 38)  0.18 | 19 (2) | 3414 | -98 (-292, 95) 0.32 | -111 (-304, 83) 0.26 | 44 (13) | 3734 | -120 (-286, 47)  0.08 | -121 (-289, 47)  0.15 |
|  | **FEV1 post-BD (ml)** | | | | | | | | | | | |
| **6 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  |  |  |  |  | 269 (74) | 4054 | **-** | **-** |
| Food only |  |  |  |  |  |  |  |  | 57 (16) | 3901 | -178 (-308, -47)  **<0.01** | -182 (-313, -52)  **<0.01** |
| Aero only |  |  |  |  |  |  |  |  | 15 (4) | 3914 | -18 (-256, 219)  0.88 | -26 (-263, 211)  0.83 |
| Food and Aero |  |  |  |  |  |  |  |  | 23 (6) | 4017 | 26 (-170, 221)  0.79 | 33 (-162, 229)  0.73 |
| **12 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  |  |  |  |  | 248 (67) | 4027 | **-** | **-** |
| Food only |  |  |  |  |  |  |  |  | 54 (15) | 3950 | -105 (-239, 30)  0.12 | -95 (-231, 41)  0.17 |
| Aero only |  |  |  |  |  |  |  |  | 26 (7) | 4080 | 8 (-177, 193)  0.93 | -0.2 (-186, 185)  0.99 |
| Food and Aero |  |  |  |  |  |  |  |  | 43 (11) | 4100 | 42 (-106, 191)  0.57 | 47 (-101, 196)  0.53 |
| **24 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  | 665 (88) | 3616 | **-** | **-** | 193 (61) | 4033 | **-** | **-** |
| Food only |  |  |  |  | 59 (8) | 3714 | 100 (-12, 213) 0.08 | 96 (-16, 209) 0.09 | 28 (9) | 3917 | -103 (-284, 78)  0.26 | -116 (-299, 66)  0.21 |
| Aero only |  |  |  |  | 18 (2) | 3499 | -112 (-310, 86) 0.27 | -105 (-303, 93) 0.30 | 55 (17) | 3949 | -103 (-239, 34)  0.14 | -106 (-243, 31)  0.13 |
| Food and Aero |  |  |  |  | 18 (2) | 3547 | -64 (-263, 135) 0.53 | -79 (-278, 120) 0.43 | 43 (13) | 4010 | -42 (-193, 109)  0.58 | -46 (-199, 106)  0.55 |
| \*Mean adjusted for gender, height and age.  \*\*Regression coefficients (95% confidence intervals) and p values; Adjusted for gender, age and height (study centre in LISAplus).  \*\*\*Regression coefficients (95% confidence intervals) and p values; Adjusted for gender, age, height, wheezing by the age of testing food sensitisation, maternal smoking during pregnancy, parental level of education and exclusive breast feeding for at least 4 months (formula allocation in MACS and study center in LISAplus). | | | | | | | | | | | | |

**Table E3 in the Online Repository: Associations between atopic sensitisation in the first two years and FEV1/FVC ratio (pre and post-BD) at 12, 15 and 18 years**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **FEV1/FVC ratio pre-BD (%)** | | | | | | | | | | | | |
|  | | **12 Years**  **(MACS)** | | | **15 Years**  **(LISAplus)** | | | | **18 Years**  **(MACS)** | | | |
| **Atopic sensitisation** | **N (%)** | **Adj.**  **Mean\*** | | **Model 1\*\*** | **Model 2\*\*\*** | **N (%)** | **Adj. Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** | **N (%)** | **Adj.**  **Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** |
| **6 Months** |  |  | |  |  |  |  |  |  |  |  |  |  |
| No | 254 (74) | 92 | | **-** | - |  |  |  |  | 276 (74) | 85 | **-** | **-** |
| Food only | 51 (15) | 89 | | -2.3 (-4.3, -0.3)  **0.02** | -2.2 (-4.2, -0.2)  **0.03** |  |  |  |  | 59 (16) | 83 | -1.4 (-3.5, 0.6)  0.16 | -1.5 (-3.6, 0.5)  0.14 |
| Aero only | 17 (5) | 95 | | 3.7 (0.4, 7.1)  **0.03** | 3.8 (0.5, 7.1)  **0.02** |  |  |  |  | 15 (4) | 85 | -0.5 (-4.4, 3.3)  0.78 | -0.6 (-4.5, 3.2)  0.74 |
| Food and Aero | 20 (6) | 94 | | 2.6 (-0.5, 5.6)  0.09 | 2.5 (-0.6, 5.6)  0.10 |  |  |  |  | 23 (6) | 85 | -0.4 (-3.6, 2.7)  0.80 | -0.4 (-3.6, 2.7)  0.80 |
| **12 Months** |  |  | |  |  |  |  |  |  |  |  |  |  |
| No | 236 (68) | 92 | | **-** | **-** |  |  |  |  | 255 (67) | 85 | **-** | **-** |
| Food only | 47 (13) | 92 | | -0.4 (-2.5, 1.7)  0.72 | -0.2 (-2.4, 2.1)  0.88 |  |  |  |  | 55 (14) | 84 | -1.1 (-3.2, 1.1)  0.32 | -1.1 (-3.3, 1.0)  0.29 |
| Aero only | 26 (7) | 91 | | -1.4 (-4.3, 1.4)  0.31 | -1.4 (-4.2, 1.5)  0.34 |  |  |  |  | 27 (7) | 84 | -0.7 (-3.6, 2.2)  0.63 | -0.7 (-3.7, 2.2)  0.61 |
| Food and Aero | 40 (12) | 90 | | -1.8 (-4.2,44.1)  0.11 | -1.7 (-4.1, 0.6)  0.14 |  |  |  |  | 44 (12) | 84 | -1.1 (-3.4, 1.3)  0.37 | -1.1 (-3.5, 1.2)  0.34 |
| **24 Months** |  |  | |  |  |  |  |  |  |  |  |  |  |
| No | 195 (62) | 92 | | **-** | **-** | 681 (88) | 87 | **-** | **-** | 198 (61) | 86 | **-** | **-** |
| Food only | 24 (8) | 91 | | -0.8 (-3.7, 2.2)  0.61 | -0.6 (-3.5, 2.4)  0.70 | 61 (8) | 86 | -0.6 (-2.1, 1) 0.49 | -0.5 (-2.1, 1.0) 0.50 | 28 (9) | 85 | -0.8 (-3.8, 2.1)  0.57 | -0.9 (-3.9, 2.1)  0.54 |
| Aero only | 53 (17) | 90 | | -1.4 (-3.5, 0.8)  0.20 | -1.4 (-3.5, 0.8)  0.20 | 17 (2) | 83 | -3.3 (-6.2, -0.4) **0.03** | -3.3 (-6.1, -0.4) **0.03** | 56 (17) | 83 | -3.0 (-5.2, -0.7)  **<0.01** | -3.0 (-5.3, -0.8)  **<0.01** |
| Food and Aero | 40 (13) | 92 | | -0.2 (-2.6, 2.1)  0.84 | 0.1 (-2.3, 2.5)  0.93 | 19 (2) | 84 | -2.5 (-5.2, 0.3) 0.08 | -2.6 (-5.3, 0.2) 0.07 | 44 (13) | 83 | -1.9 (-4.4, 0.4)  0.11 | -1.9 (-4.4, 0.5)  0.11 |
|  | **FEV1/FVC ratio post-BD (%)** | | | | | | | | | | | |  |
| **6 Months** |  |  | |  |  |  |  |  |  |  |  |  |  |
| No |  |  | |  |  |  |  |  |  | 269 (74) | 89 | **-** | **-** |
| Food only |  |  | |  |  |  |  |  |  | 57 (16) | 86 | -2.2 (-4.0, -0.4)  **0.01** | -2.3 (-4.0, -0.5)  **0.01** |
| Aero only |  |  | |  |  |  |  |  |  | 15 (4) | 90 | 0.3 (-2.8, 3.5)  0.82 | 0.2 (-2.9, 3.4)  0.86 |
| Food and Aero |  |  | |  |  |  |  |  |  | 23 (6) | 88 | -0.7 (-3.3, 1.9)  0.58 | -0.6 (-3.2, 1.9)  0.63 |
| **12 Months** |  |  | |  |  |  |  |  |  |  |  |  |  |
| No |  |  | |  |  |  |  |  |  | 248 (67) | 89 | **-** | **-** |
| Food only |  |  | |  |  |  |  |  |  | 54 (15) | 88 | -0.6 (-2.3, 1.1)  0.50 | -0.6 (-2.4, 1.1)  0.50 |
| Aero only |  |  | |  |  |  |  |  |  | 26 (7) | 89 | 0.1 (-2.5, 2.4)  0.96 | -0.04 (-2.5, 2.4)  0.97 |
| Food and Aero |  |  | |  |  |  |  |  |  | 43 (11) | 87 | -2.0 (-4.0, -0.1)  **0.04** | -2.1 (-4.1, -0.1)  **0.03** |
| **24 Months** |  |  | |  |  |  |  |  |  |  |  |  |  |
| No |  |  | |  |  | 665 (88) | 89 | **-** | - | 193 (61) | 89 | **-** | **-** |
| Food only |  |  | |  |  | 59 (8) | 89 | -0.3 (-1.7, 1.1) 0.66 | -0.3 (-1.6, 1.1) 0.68 | 28 (9) | 87 | -1.3 (-3.8, 1.1)  0.29 | -1.3 (-3.8, 1.1)  0.30 |
| Aero only |  |  | |  |  | 18 (2) | 89 | -0.5 (-2.9, 1.9) 0.71 | -0.5 (-2.9, 1.9) 0.70 | 55 (17) | 88 | -1.5 (-3.3, 0.3)  0.11 | -1.5 (-3.3, 0.3)  0.11 |
| Food and Aero |  |  | |  |  | 18 (2) | 86 | -2.7 (-5.1, -0.3) **0.03** | -2.8 (-5.3, -0.4) **0.02** | 43 (13) | 88 | -1.4 (-3.5, 0.6)  0.17 | -1.4 (-3.5, 0.6)  0.17 |
| \*Mean adjusted for gender, height and age.  \*\*Regression coefficients (95% confidence intervals) and p values; Adjusted for gender, age and height (study centre in LISAplus).  \*\*\*Regression coefficients (95% confidence intervals) and p values; Adjusted for gender, age, height, wheezing by the age of testing food sensitisation, maternal smoking during pregnancy, parental level of education and exclusive breast feeding for at least 4 months (formula allocation in MACS and study center in LISAplus). | | | | | | | | | | | | | |

**Table E4 in the Online Repository: Associations between atopic sensitisation in the first two years and FVC (pre and post-BD) at 12, 15 and 18 years.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **FVC pre-BD (ml)** | | | | | | | | | | | |
|  |  | **12 Years**  **(MACS)** | | | **15 Years**  **(LISAplus)** | | | | **18 Years**  **(MACS)** | | | |
| **Atopic sensitisation** | **N (%)** | **Adj.**  **Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** | **N (%)** | **Adj. Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** | **N (%)** | **Adj.**  **Mean\*** | **Model 1\*\*** | **Model 2\*\*\*** |
| **6 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No | 254 (74) | 2588 | **-** | **-** |  |  |  |  | 276 (74) | 4582 | **-** | **-** |
| Food only | 51 (15) | 2482 | -106 (-225, 14)  0.08 | -113 (-231, 6)  0.06 |  |  |  |  | 59 (16) | 4437 | -137 (-299, 24)  0.09 | -143 (-305, 19)  0.08 |
| Aero only | 17 (5) | 2620 | 32 (-164, 229)  0.74 | 21 (-173, 215)  0.83 |  |  |  |  | 15 (4) | 4701 | 63 (-237, 363)  0.67 | 59 (-240, 359)  0.69 |
| Food and Aero | 20 (6) | 2505 | -83 (-264, 98)  0.36 | -81 (-261, 98)  0.37 |  |  |  |  | 23 (6) | 4571 | 3 (-244, 249)  0.98 | 16 (-231, 263)  0.89 |
| **12 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No | 236 (68) | 2591 | **-** | **-** |  |  |  |  | 255 (67) | 4587 | **-** | **-** |
| Food only | 47 (13) | 2458 | -134 (-260, -7)  **0.03** | -144 (-271, -16)  **0.02** |  |  |  |  | 55 (14) | 4451 | -127 (-295, 41)  0.13 | -115 (-284, 55)  0.18 |
| Aero only | 26 (7) | 254 | -45 (-209, 118)  0.58 | -57 (-219, 105)  0.48 |  |  |  |  | 27 (7) | 4502 | -64 (-293, 165)  0.58 | -72 (-302, 157)  0.53 |
| Food and Aero | 40 (12) | 2638 | 47 (-89, 182)  0.49 | 40 (-94, 174)  0.56 |  |  |  |  | 44 (12) | 4637 | 38 (-147, 223)  0.68 | 48 (-137, 233)  0.61 |
| **24 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No | 195 (62) | 2561 | **-** | **-** | 681 (88) | 4085 | **-** |  | 198 (61) | 4566 | **-** | **-** |
| Food only | 24 (8) | 2492 | -69 (-234, 96)  0.40 | -78 (-243, 86)  0.34 | 61 (8) | 4114 | 39 (-92, 170) 0.56 | 33 (-99, 164) 0.63 | 28 (9) | 4524 | -71 (-300, 158)  0.54 | -82 (-314, 149)  0.48 |
| Aero only | 53 (17) | 2493 | -68 (-186, 51)  0.26 | -70 (-188, 48)  0.24 | 17 (2) | 3969 | -122 (-362, 119) 0.32 | -106 (-347, 136) 0.39 | 56 (17) | 4508 | -31 (-203, 140)  0.72 | -39 (-212, 134)  0.65 |
| Food and Aero | 40 (13) | 2493 | -68 (-200, 64)  0.31 | -95 (-227, 38)  0.16 | 19 (2) | 4121 | 36 (-193, 266) 0.76 | 29 (-202, 259) 0.81 | 44 (13) | 4503 | -37 (-227, 152)  0.69 | -42 (-234, 149)  0.66 |
|  | **FVC post-BD (ml)** | | | | | | | | | | | |
| **6 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  |  |  |  |  | 269 (74) | 4601 | **-** | - |
| Food only |  |  |  |  |  |  |  |  | 57 (16) | 4544 | -87 (-245, 71)  0.27 | -89 (-247, 70)  0.27 |
| Aero only |  |  |  |  |  |  |  |  | 15 (4) | 4382 | -55 (-343, 232)  0.70 | -59 (-346, 228)  0.68 |
| Food and Aero |  |  |  |  |  |  |  |  | 23 (6) | 4603 | 67 (-169, 304)  0.57 | 70 (-167, 307)  0.56 |
| **12 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  |  |  |  |  | 248 (67) | 4575 | **-** | **-** |
| Food only |  |  |  |  |  |  |  |  | 54 (15) | 4526 | -87 (-249, 75)  0.29 | -77 (-241, 87)  0.35 |
| Aero only |  |  |  |  |  |  |  |  | 26 (7) | 4607 | -9 (-232, 214)  0.93 | -18 (-242, 206)  0.87 |
| Food and Aero |  |  |  |  |  |  |  |  | 43 (11) | 4744 | 132 (-47, 311)  0.14 | 141 (-38, 320)  0.12 |
| **24 Months** |  |  |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  | 665 (88) | 4068 | **-** | - | 193 (61) | 4561 | **-** | - |
| Food only |  |  |  |  | 59 (8) | 4180 | 120 (-15, 255) 0.08 | 115 (-21, 250) 0.10 | 28 (9) | 4552 | -27 (-244, 189)  0.80 | -44 (-263, 175)  0.69 |
| Aero only |  |  |  |  | 18 (2) | 3942 | -132 (-369, 105) 0.27 | -123 (-360, 115) 0.31 | 55 (17) | 4531 | -43 (-207, 120)  0.60 | -48 (-213, 117)  0.56 |
| Food and Aero |  |  |  |  | 18 (2) | 4151 | 83 (-156, 321) 0.50 | 71 (-168, 310) 0.56 | 43 (13) | 4596 | 18 (-163, 199)  0.84 | 13 (-170, 196)  0.89 |
| \*Mean adjusted for gender, height and age.  \*\*Regression coefficients (95% confidence intervals) and p values; Adjusted for gender, age and height (study center in LISAplus).  \*\*\*Regression coefficients (95% confidence intervals) and p values; Adjusted for gender, age, height, wheezing by the age of testing food sensitisation, maternal smoking during pregnancy, parental level of education and exclusive breast feeding for at least 4 months (formula allocation in MACS and study center in LISAplus). | | | | | | | | | | | | |

**Table E5 in the Online Repository: Associations between degree of sensitisation to food allergens (at 6 and 12 months) and pre-BD FEV1 (at 12 years) in MACS.**

|  |  |  |
| --- | --- | --- |
|  | **12 Years (MACS)** | |
|  | **FEV1 pre-BD (mL)** | |
| **At 6 Months** | **Coef. (95% CI)** | ***p*-value** |
| **Per 1 mm increase in each SPT** |  |  |
| Milk | -30.34 (-63.15, 2.47) | 0.07 |
| Egg | -5.95 (-19.70, 7.80) | 0.40 |
| Peanut | -32.47 (-58.01, -6.94) | **0.01** |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -8.64 (-17.53, 0.25) | 0.06 |
| **Per food allergen sensitisation (2mm+)** | -81.36 (-136.62, -26.09) | **<0.01** |
| **Number of food allergens sensitised (2mm+)** |  |  |
| **0** | Ref | - |
| **1** | -74.66 (-184.80, 35.48) | 0.18 |
| **2+** | -206.98 (-347.60, -66.35) | **<0.01** |
| **At 12 Months** |  |  |
| **Per 1 mm increase in each SPT)** |  |  |
| Milk | -14.32 (-34.48, 5.84) | 0.16 |
| Egg | -8.54 (-17.74, 0.67) | 0.07 |
| Peanut | -18.42 (-34.89, -1.94) | **0.03** |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -6.83 (-12.60, -1.05) | **0.02** |
| **Per food allergen sensitisation (2mm+)** | -63.01 (-110.83, -15.19) | **0.01** |
| **Number of food allergens sensitised (2mm+)** |  |  |
| **0** | Ref | - |
| **1** | 8.97 (-107.12, 125.07) | 0.88 |
| **2+** | -188.10 (-305.40, -70.81) | **<0.01** |

**\*Includes all three food allergens (milk, egg and peanut).**

***p*-values< 0.05 are bolded.**

**Table E6 in the Online Repository: Associations between degree of sensitisation to food allergens (at 6 and 12 months) and pre and post-BD FEV1 (at 18 years) in MACS.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **18 Years (MACS)** | | | |
|  | **FEV1 pre-BD (mL)** | | **FEV1 post-BD (mL)** | |
| **At 6 Months** | **Coef. (95% CI)** | ***p*-value** | **Coef. (95% CI)** | ***p*-value** |
| **Per 1 mm increase in each SPT** |  |  |  |  |
| Milk | -34.91 (-72.41, 2.59) | 0.07 | -23.39 (-57.51, 10.74) | 0.18 |
| Egg | -17.26 (-36.97, 2.46) | 0.09 | -12.55 (-30.78, 5.67) | 0.18 |
| Peanut | -32.14 (70.88, 6.60) | 0.10 | -11.54 (-48.95, 25.87) | 0.54 |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -13.73 (-26.01, -1.45) | **0.03** | -8.56 (-19.94, 2.81) | 0.14 |
| **Per food allergen sensitisation (2mm+)** |  |  |  |  |
| **Number of food allergens sensitised (2mm+)** |  |  |  |  |
| 0 | Ref | - | Ref | - |
| 1 |  |  |  |  |
| 2+ |  |  |  |  |
| **At 12 Months** | **Coef. (95% CI)** | ***p*-value** | **Coef. (95% CI)** | ***p*-value** |
| **Per 1 mm increase in each SPT)** |  |  |  |  |
| Milk | -25.39 (-52.45 1.66) | 0.07 | -22.35 (-46.75 2.05) | 0.07 |
| Egg | -7.02 (-19.80, 5.75) | 0.28 | -7.55 (-19.14, 4.05) | 0.20 |
| Peanut | -20.38 (-43.05, 2.29) | 0.08 | -10.78 (-31.40, 9.85) | 0.31 |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -7.33 (-15.23, 0.56) | 0.07 | -6.12 (-13.28 1.04) | 0.09 |
| **Per food allergen sensitisation (2mm+)** | -60.89 (-123.57, 1.79) | 0.06 | -34.65 (-91.92, 22.57) | 0.23 |
| **Number of food allergens sensitised (2mm+)** |  |  |  |  |
| 0 | Ref | - | Ref | - |
| 1 | -62.98 (-209.19, 83.23 | 0.40 | -66.41 (-20.99, 68.17) | 0.33 |
| 2+ | -310.94 (-504.81, -117.07) | **<0.01** | -227.20 (-407.50, -46.91) | **<0.01** |

**\*Includes all three food allergens (milk, egg and peanut).**

***p*-values< 0.05 are bolded.**

**Table E7 in the Online Repository: Associations between degree of sensitisation to food allergens (at 6 and 12 months) and pre-BD FEV1/FVC ratio (at 12 years) in MACS.**

|  |  |  |
| --- | --- | --- |
|  | **12 Years (MACS)** | |
|  | **FEV1 /FVC(%)** | |
| **At 6 Months** | **Coef. (95% CI)** | ***p*-value** |
| **Per 1 mm increase in each SPT** |  |  |
| Milk | -0.43 (-1.08, 0.22) | 0.19 |
| Egg | -0.26 (-0.53, 0.01) | 0.06 |
| Peanut | -0.52 (-1.03, -0.02) | **0.04** |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -0.20 (-0.38, -0.03) | **0.02** |
| **Per food allergen sensitisation (2mm+)** | -0.89 (-1.99, 0.22) | 0.12 |
| **Number of food allergens sensitised (2mm+)** |  |  |
| 0 | Ref | - |
| 1 | -1.32 (-3.52, 0.89) | 0.24 |
| 2+ | -2.24 (-5.05, 0.57) | 0.12 |
| **At 12 Months** |  |  |
| **Per 1 mm increase in each SPT)** |  |  |
| Milk | -0.22 (-0.62, 0.17) | 0.27 |
| Egg | -0.12 (-0.30, 0.06) | 0.20 |
| Peanut | -0.18 (-0.50, 0.15) | 0.28 |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -0.09 (-0.20, 0.03) | 0.13 |
| **Per food allergen sensitisation (2mm+)** | -0.64 (-1.58, 0.31) | 0.19 |
| **Number of food allergens sensitised (2mm+)** |  |  |
| 0 | Ref | - |
| 1 | 0.46 (-1.84, 2.75) | 0.70 |
| 2+ | -2.41 (-4.73, -0.09) | **0.04** |

**\*Includes all three food allergens (milk, egg and peanut).**

***p*-values< 0.05 are bolded.**

**Table E8 in the Online Repository: Associations between degree of sensitisation to food allergens (at 6 and 12 months) and pre and post-BD FEV1/FVC ratio (at 18 years) in MACS.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **18 Years (MACS)** | | | |
|  | **FEV1/FVC (%)** | | **FEV1/FVC (%))** | |
| **At 6 Months** | **Coef. (95% CI)** | ***p*-value** | **Coef. (95% CI)** | ***p*-value** |
| **Per 1 mm increase in each SPT** |  |  |  |  |
| Milk |  |  |  |  |
| Egg |  |  |  |  |
| Peanut |  |  |  |  |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -0.17 (-0.35, 0.01) | 0.06 | -0.19 (-0.34, -0.04) | **0.02** |
| **Per food allergen sensitisation (2mm+)** | -1.21 (-2.31, -0.10) | **0.03** | -1.34 (-2.26, -0.42) | **<0.01** |
| **Number of food allergens sensitised (2mm+)** |  |  |  |  |
| 0 | Ref | - | Ref | - |
| 1 | -0.29 (-2.46, 1.87) | 0.79 | -1.22 (-3.02, 0.58) | 0.18 |
| 2+ | -2.90 (-5.77, -0.03) | 0.05 | -3.06 (-5.47, -0.65) | 0.01 |
| **At 12 Months** |  |  |  |  |
| **Per 1 mm increase in each SPT)** |  |  |  |  |
| Milk |  |  |  |  |
| Egg |  |  |  |  |
| Peanut |  |  |  |  |
| **Per 1 mm increase in the aggregated SPT to food allergens** | -0.13 (-.24, -0.01) | **0.03** | -0.14 (-0.24, -0.05) | **<0.01** |
| **Per food allergen sensitisation (2mm+)** | -0.71 (-1.63, 0.20) | 0.13 | -0.85 (-1.61, -0.10) | **0.03** |
| **Number of food allergens sensitised (2mm+)** |  |  |  |  |
| 0 | Ref | - | Ref | - |
| 1 | 0.21 (-2.02, 2.44) | 0.86 | -0.21 (-2.05, 1.62) | 0.82 |
| 2+ | -2.39 (-4.64, -0.14) | **0.04** | -2.37 (-4.23, -0.51) | **0.01** |

**\*Includes all three food allergens (milk, egg and peanut).**

***p*-values< 0.05 are bolded.**