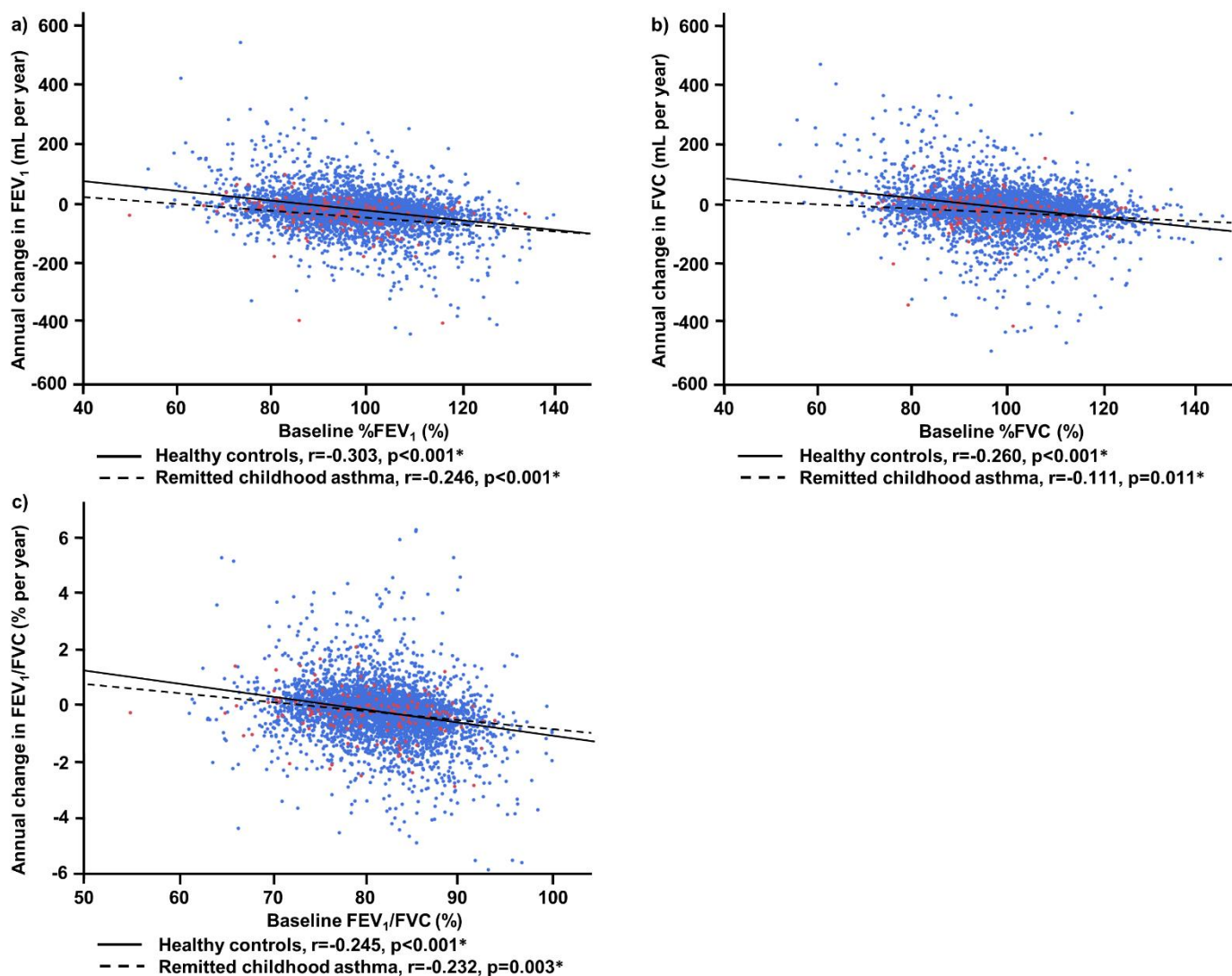
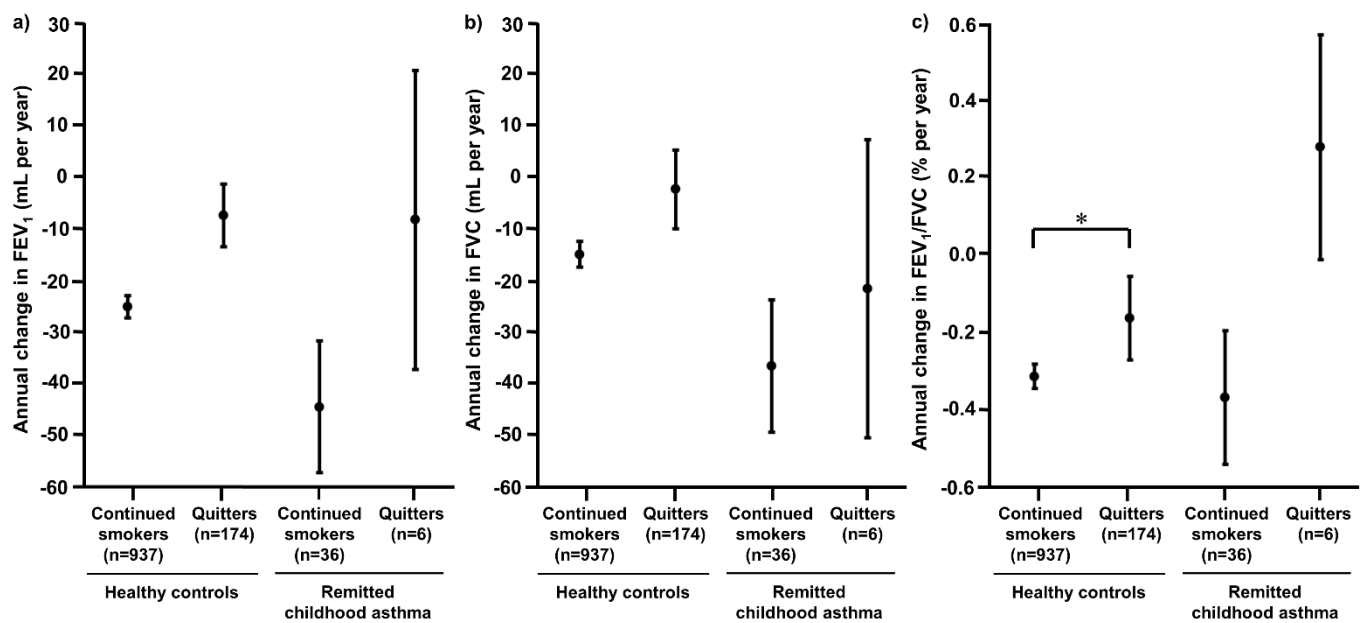


Supplementary Figure S1. Comparison of longitudinal changes in a) forced expiratory volume in 1 s (FEV₁), b) forced vital capacity (FVC) and c) FEV₁/FVC in the healthy controls and participants with remitted childhood asthma in the whole cohort. Data are presented as mean±SEM. *: P<0.05.



Supplementary Figure S2. Relationship between the baseline and longitudinal decline in lung function in participants with remitted childhood asthma and healthy controls, including those with airflow obstruction at the baseline visit ($n=3932$). Blue dots represent healthy controls. Red dots represent participants with remitted childhood asthma. *: $P < 0.05$, Spearman's rank correlation. FEV₁, forced expiratory volume in 1 s; FVC, forced vital capacity; %FEV₁, per cent predicted forced expiratory volume in 1 s; %FVC, per cent predicted forced vital capacity.



Supplementary Figure S3. Longitudinal changes in a) forced expiratory volume in 1 s (FEV₁), b) forced vital capacity (FVC) and c) FEV₁/FVC among participants classified as current smokers (sub-grouped as quitters and continued smokers) at the baseline visit. Data are presented as mean \pm SEM. *: P < 0.05, Kruskal-Wallis test followed by Steel-Dwass test.

Supplementary Table S1. Baseline characteristics of the participants who could be and could not be followed up for at least 2 years

Characteristics	Participants ≥ 2 years of follow-up (n=4555)	Participants < 2 years of follow-up (n=7607)	Standardised differences	<i>p</i> -value
Male	3799 (83.4)	5560 (73.1)	0.252	$<0.001^*$
Age (years)	48.4 \pm 6.7	49.7 \pm 8.3	0.172	$<0.001^*$
Height (cm)	168.2 \pm 7.4	166.6 \pm 8.0	0.208	$<0.001^*$
BMI (kg/m ²)	23.5 \pm 3.2	23.2 \pm 3.3	0.092	$<0.001^*$
Smoking status				$<0.001^*$
Never-smoker	1835 (40.3)	3628 (47.7)	0.149	
Ex-smoker	1385 (30.4)	2016 (26.5)	0.087	
Current smoker	1335 (29.3)	1963 (25.8)	0.078	
Pack-years smoking	13.1 \pm 16.1	12.0 \pm 16.9	0.067	$<0.001^*$
Exposure to dust	346 (7.6)	506 (6.7)	0.035	0.002*
Cardiac disease	89 (2.0)	119 (1.6)	0.030	0.101
Respiratory symptoms				
Cough	511 (11.2)	847 (11.1)	0.003	0.156
Phlegm	618 (13.6)	915 (12.0)	0.048	$<0.001^*$
Breathlessness	1309 (28.7)	1925 (25.3)	0.077	$<0.001^*$
Lung function measurements				
FEV ₁ (L)	3.15 \pm 0.61	3.00 \pm 0.65	0.238	$<0.001^*$
FEV ₁ (% pred)	97.2 \pm 13.0	96.7 \pm 13.4	0.038	0.034*
FVC (L)	3.89 \pm 0.74	3.67 \pm 0.79	0.287	$<0.001^*$
FVC (% pred)	97.7 \pm 12.5	96.8 \pm 13.0	0.071	$<0.001^*$
FEV ₁ /FVC (%)	81.2 \pm 6.0	81.9 \pm 6.6	0.111	$<0.001^*$
Follow-up period (years)	5.3 \pm 2.3	0.2 \pm 0.4	3.089	$<0.001^*$

Data are presented as n (%) or mean \pm SD, unless otherwise stated. *: $P<0.05$, chi-square test, Fisher exact test, or Mann-Whitney U-test. BMI, body mass index; FEV₁, forced expiratory volume in 1 s; FVC, forced vital capacity.

Supplementary Table S2. Baseline characteristics of the participants, including those with airflow obstruction at the baseline visit before propensity matching

Characteristics	Healthy controls (n=3791)	Remitted childhood asthma (n=141)	Standardised differences	<i>p</i> -value
Male	3139 (82.8)	124 (87.9)	0.145	0.110
Age (years)	48.3±6.2	46.3±5.8	0.333	<0.001*
Height (cm)	168.2±7.4	168.2±7.3	0.000	0.960
BMI (kg/m ²)	23.5±3.2	23.6±3.1	0.032	0.768
Smoking status				0.982
Never-smoker	1543 (40.7)	57 (40.4)	0.006	
Ex-smoker	1137 (30.0)	42 (29.8)	0.004	
Current smoker	1111 (29.3)	42 (29.8)	0.011	
Pack-years smoking	12.9±15.8	12.1±13.3	0.055	0.943
Exposure to dust	265 (7.0)	9 (6.4)	0.024	0.626
Cardiac disease	63 (1.7)	2 (1.4)	0.024	0.821
Respiratory symptoms				
Cough	361 (9.5)	17 (12.1)	0.084	0.429
Phlegm	452 (11.9)	24 (17.0)	0.145	0.136
Breathlessness	1006 (26.5)	38 (27.0)	0.011	0.740
Lung function measurements				
FEV ₁ (L)	3.17±0.60	3.11±0.55	0.104	0.192
FEV ₁ (% pred)	98.0±12.5	94.2±13.2	0.296	<0.001*
FVC (L)	3.90±0.75	3.88±0.67	0.028	0.704
FVC (% pred)	98.0±12.4	95.5±12.3	0.202	0.007*
FEV ₁ /FVC (%)	81.5±5.6	80.3±6.5	0.198	0.045*
Follow-up period (years)	5.2±2.3	5.6±2.5	0.167	0.048*
Spirometry tests (n)	3.8±1.3	3.9±1.2	0.080	0.142

Data are presented as n (%) or mean±SD, unless otherwise stated. *: P<0.05, chi-square test, Fisher exact test, or Mann-Whitney U-test. BMI, body mass index; FEV₁, forced expiratory volume in 1 s; FVC, forced vital capacity.

Supplementary Table S3. Baseline characteristics of the current smokers, including those with airflow obstruction at the baseline visit, before propensity matching

Characteristics	Healthy controls (n=1111)		Standardised differences	<i>p</i> -value	Remitted childhood asthma (n=42)		Standardised differences	<i>p</i> -value
	Continued smoker (n=937)	Quitter (n=174)			Continued smoker (n=36)	Quitter (n=6)		
Male	907 (96.8)	164 (94.3)	0.121	0.098	36 (100.0)	6 (100.0)	0.000	-
Age (years)	47.9±6.0	49.3±5.9	0.235	0.004*	47.2±4.8	51.5±1.9	1.178	0.025*
Height (cm)	170.4±6.2	170.5±6.3	0.016	0.809	170.8±5.6	169.7±4.3	0.220	0.615
BMI (kg/m ²)	23.9±3.1	23.5±3.2	0.127	0.149	23.6±2.8	22.7±1.7	0.389	0.350
Pack-years smoking	25.7±13.8	25.1±15.8	0.040	0.648	26.8±9.9	26.2±5.4	0.075	0.914
Exposure to dust	84 (9.0)	10 (5.7)	0.127	0.264	1 (2.8)	1 (16.7)	0.482	0.100
Cardiac disease	7 (0.7)	5 (2.9)	0.166	0.013*	0 (0.0)	1 (16.7)	0.633	0.013*
Respiratory symptoms								
Cough	149 (15.9)	36 (20.7)	0.124	0.051	9 (25.0)	1 (16.7)	0.205	0.950
Phlegm	219 (23.4)	44 (25.3)	0.044	0.334	10 (27.8)	2 (33.3)	0.120	0.602
Breathlessness	369 (39.4)	53 (30.5)	0.187	0.120	16 (44.4)	2 (33.3)	0.229	0.768
Lung function measurements								
FEV ₁ (L)	3.26±0.53	3.18±0.55	0.148	0.036*	3.06±0.51	3.05±0.65	0.017	0.369
FEV ₁ (% pred)	96.0±12.1	94.9±12.9	0.088	0.229	88.9±12.4	92.2±16.9	0.223	0.774
FVC (L)	4.06±0.65	3.93±0.69	0.194	0.015*	3.89±0.58	3.82±0.70	0.109	0.640
FVC (% pred)	96.7±11.8	94.9±13.2	0.144	0.087	91.2±11.4	92.7±14.0	0.117	1.000
FEV ₁ /FVC (%)	80.4±5.3	81.1±5.4	0.131	0.271	78.9±7.5	79.9±6.3	0.144	0.943
Follow-up period (years)	5.4±2.4	4.6±1.4	0.407	0.001*	5.6±2.5	4.6±1.2	0.510	0.388

Spirometry tests (n)	3.9±1.3	3.6±1.3	0.231	0.002*	3.7±1.2	4.3±1.2	0.500	0.233
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Data are presented as n (%) or mean±SD, unless otherwise stated. *: P<0.05, chi-square test, Fisher exact test, or Mann-Whitney U-test.

BMI, body mass index; FEV₁, forced expiratory volume in 1 s; FVC, forced vital capacity.