

**eTable 1**

Comparison of 422 students enrolled in evaluation of Puff City and included in analysis to enrolled students excluded from analysis of depression as effect modifier of intervention effectiveness and quality of life<sup>a</sup>

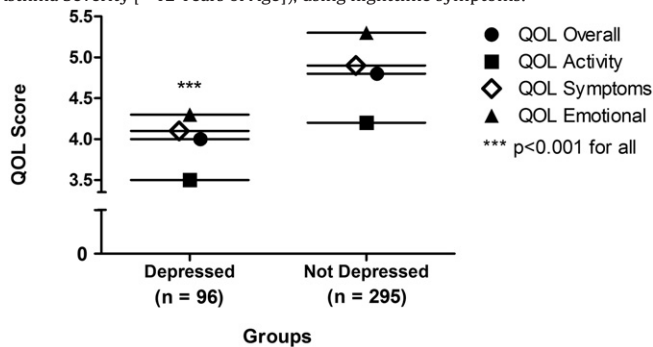
Variable	Included in analysis, No. (%) (n = 355)	Not included in analysis, No. (%) (n = 67)	P value	No. missing
Physician diagnosis of asthma			.99	
Yes	284 (80.0)	53 (79.1)		
No	56 (15.8)	11 (16.4)		
Don't know	15 (4.2)	3 (4.5)		
Completed all 4 sessions	322 (90.7)	51 (76.1)	.001	
Completed 6-month follow-up	310 (87.3)	51 (76.1)	.02	
Completed 12-month follow-up	328 (92.4)	52 (77.6)	.001	
Age, mean (SD)	15.9 (1.2)	16.2 (1.1)	.06	
Female	207 (58.3)	45 (67.2)	.18	
Exposed to household ETS	229 (65.6)	38 (60.3)	.42	10
Smoke >2 cigarettes on days smoked in last 30 days	40 (11.4)	9 (13.6)	.61	6
Medicaid enrollment	209 (59.4)	39 (58.2)	.56	4
Indicators of uncontrolled asthma <sup>b</sup>				
>8 Symptom-days in last 30 days	97 (27.3)	16 (23.9)	.56	
>3 Symptom-nights in last 30 nights	122 (35.2)	29 (43.9)	.17	9
>4 Days of restricted activity in last 30 days	148 (41.7)	26 (38.8)	.66	
>4 Days had to change plans in last 30 days	50 (14.4)	9 (13.6)	.86	10
>2 Schooldays missed due to asthma in last 30 days	76 (22.0)	12 (18.2)	.49	11
Medical care use				
>1 Hospitalization in last 12 months	62 (17.5)	10 (15.2)	.64	2
>1 Emergency department visit in last 12 months	130 (36.8)	25 (37.9)	.87	3
Asthma severity <sup>c</sup>				
Mild, intermittent to persistent	267 (75.2)	51 (76.1)	.87	
Moderate to severe	88 (24.8)	16 (23.9)		

Abbreviation: ETS, environmental tobacco smoke.

<sup>a</sup>Students who enrolled in the study, completed baseline assessment, and caregiver completed baseline assessment are presented. Data are presented as number (percentage) of students unless otherwise indicated.

<sup>b</sup>Indicators of uncontrolled asthma adapted from the Guidelines for Diagnosis and Treatment of Asthma from the Expert Panel Report 3 (Figure 15. Classification of Asthma Control [ $\geq 12$  Years of Age]), with exception of days changed plans and school days missed.<sup>6</sup>

<sup>c</sup>Classification of asthma severity and cutoffs adapted from the Guidelines for Diagnosis and Treatment of Asthma from the Expert Panel Report 3 (Figure 14. Classification of Asthma Severity [ $\geq 12$  Years of Age]), using nighttime symptoms.<sup>6</sup>



**eFig. 1.** Comparison of baseline quality of life scores for each domain (overall, activity, symptom related, and emotional) in teens with asthma with or without depressive symptoms reported at baseline before randomization.

**eTable 2**

Results of logistic regression analysis for 96 teens depressed at baseline, from association between indicators of uncontrolled asthma at 12 months and treatment arm for the analysis of 355 teens participating in a randomized trial of Puff City by depression status

Indicator <sup>a</sup>	Intervention, No. (%)	Control, No. (%)	Adjusted OR (95% CI) <sup>b</sup>	P value
>8 Symptom-days in last 30 days (or $\geq 2$ days per week)	9 (18.0)	14 (30.4)	0.35 (0.11–1.15)	.08
$\geq 3$ Symptom-nights in last 30 nights	14 (28.0)	18 (39.1)	0.64 (0.23–1.80)	.40
>4 Days of restricted activity in last 30 days	14 (28.0)	19 (41.3)	0.51 (0.19–1.37)	.18
>4 Days had to change plans in last 30 days	7 (14.0)	8 (17.4)	0.87 (0.26–2.93)	.82
>2 Schooldays missed in last 30 days	19 (38.0)	25 (54.3)	0.55 (0.22–1.42)	.22
>2 Schooldays missed due to asthma in last 30 days	10 (20.0)	10 (21.7)	1.00 (0.34–2.88)	.99

Abbreviations: CI, confidence interval; OR, odds ratio.

<sup>a</sup>Adjusted logistic regression, adjusting for baseline measurement, baseline asthma severity, school of enrollment, teen sex, and caregiver depression in the last 30 days.

<sup>b</sup>Classification of asthma control adapted from the Guidelines for Diagnosis and Treatment of Asthma from the Expert Panel Report 3 (Figure 15. Classification of Asthma Control [ $\geq 12$  Years of Age]).

**eTable 3**

Results of logistic regression analysis for 259 teens not depressed at baseline, from association between indicators of uncontrolled asthma at 12 months and treatment arm for the analysis of 355 teens participating in a randomized trial of Puff City by depression status

Indicator <sup>a</sup>	Intervention, No. (%)	Control, No. (%)	Adjusted OR (95% CI) <sup>b</sup>	P value
>8 Symptom-days in last 30 days (or $\geq 2$ days per week)	8 (6.7)	21 (15.1)	0.28 (0.10–0.76)	.01
$\geq 3$ Symptom-nights in last 30 nights	25 (20.8)	36 (25.9)	0.62 (0.32–1.20)	.16
>4 Days of restricted activity in last 30 days	17 (14.2)	36 (25.9)	0.46 (0.23–0.94)	.03
>4 Days had to change plans in last 30 days	9 (7.5)	13 (9.4)	0.59 (0.20–1.67)	.32
>2 Schooldays missed in last 30 days	34 (28.3)	52 (37.4)	0.57 (0.33–1.01)	.052
>2 Schooldays missed due to asthma in last 30 days	10 (8.3)	15 (10.8)	0.63 (0.25–1.55)	.31

Abbreviations: CI, confidence interval; OR, odds ratio.

<sup>a</sup>Adjusted logistic regression, adjusting for baseline measurement, baseline asthma severity, school of enrollment, teen sex, and caregiver depression in the last 30 days.

<sup>b</sup>Classification of asthma control adapted from the Guidelines for Diagnosis and Treatment of Asthma from the Expert Panel Report 3 (“Figure 15. Classification of Asthma Control [ $\geq 12$  Years of Age]).