

Supplemental Table 1. Subject listing of demographic characteristics, pulmonary function and dyspnea

Subject	Age (yrs)	Gender	FEV ₁ (% _{pred})	FVC (% _{pred})	FEV ₁ /FVC (%)	IC (% _{pred})	RV (% _{pred})	TLC (% _{pred})	sRaw (cmH ₂ O·s)	FeNO (ppb)	PC ₂₀ (mg/ml)	mMRC	Borg Baseline	Borg Post-MCh
Healthy Volunteers (n=8)														
021	27	F	105	105	85	124	107	113	2.60	18	8.5	0	0	0.0
023	39	M	86	95	72	125	182	118	2.77	-	54.4	0	0	0.0
027	24	M	108	110	80	113	179	121	4.00	-	-	0	0.5	2.0
030	50	F	106	107	79	134	75	110	3.08	-	-	0	0	2.0
031	26	F	97	90	93	99	109	96	3.24	-	46.1	0	0	0.5
033	23	M	93	91	85	110	99	99	2.18	-	52.6	0	0	0.0
034	30	M	101	108	77	111	102	109	2.81	-	49.9	0	0	0.5
035	50	F	117	118	79	126	88	115	3.01	-	-	0	0	0.5
Mean(±SD)	34(11)	-	102(10)	103(10)	81(6)	118(11)	118(40)	110(9)	2.96(0.53)	-	42.3(19.2)	0(0)	0.1(0.2)	0.7(0.8)
Asthmatics with No Defects (n=9)														
005	45	F	78	87	72	124	108	102	4.97	-	2.4	2	0.5	4
006	23	F	96	91	92	107	104	97	1.50	8	16.9	1	1	7
007	24	M	81	85	81	86	111	94	3.22	12	27.9	0	0.5	3
008	34	M	82	79	84	110	105	91	2.67	16	55.2	0	0	3
010	30	F	102	101	87	135	82	96	2.25	21	3.4	1	0	2
017	23	F	112	102	96	128	164	122	3.95	12	13.2	0	0	3
018	22	F	79	83	82	90	115	91	5.58	37	0.4	0	0	3
020	23	F	82	91	79	104	69	87	3.80	17	0.3	1	0	2
024	20	F	108	110	86	138	85	99	2.88	10	9.1	1	0	4
Mean(±SD)	27(8)	-	91(13)	92(10)	84(7)	114(18)	105(25)	98(10)	3.42(1.22)	17(9)	14.3(16.8)	0.7(0.7)	0.2(0.3)	3.4(1.4)
Asthmatics with Defects (n=17)														
001	49	F	69	94	59	116	144	110	10.20	38	0.08	0	1	1
002	30	M	96	105	75	122	108	109	5.11	-	0.2	0	0	4
003	29	M	81	100	66	118	115	111	19.50	114	0.1	1	0.5	3
004	49	F	59	75	63	84	130	96	-	-	0.07	0	0	2
011	23	F	98	93	91	101	113	95	2.93	116	0.2	1	1	3
012	25	F	87	107	69	119	98	101	5.36	50	0.1	1	0	3
013	37	M	77	77	81	107	135	97	10.42	31	0.1	4	1	3
014	29	F	92	102	77	98	96	97	2.64	18	1.3	1	1	3
015	47	M	60	82	57	99	115	94	6.51	45	0.3	0	0.5	4
016	53	M	104	104	77	111	82	100	4.78	22	16.3	0	0	4
019	42	M	72	88	65	110	144	108	13.85	40	0.1	1	0	1
022	24	F	99	111	76	132	90	108	6.40	187	0.2	0	0	3
025	58	M	73	99	56	91	121	110	8.38	29	1.0	0	0.5	0
026	37	M	93	93	66	105	107	109	4.33	-	2.6	1	0.5	3
028	36	F	66	92	59	129	165	113	15.74	-	0.8	1	3	3
029	41	M	75	95	63	114	136	106	13.76	69	0.1	1	2	3
032	49	M	69	77	70	98	98	87	6.31	23	1.0	1	0.5	3
Mean(±SD)	39(11)	-	81(14)	94(11)	69(10)	109(13)	117(22)	103(8)	8.51(4.95)	60(50)	1.4(3.9)	0.8(1.0)	0.7(0.8)	2.7(1.1)

SD=Standard Deviation, FEV₁=Forced Expiratory Volume in 1s, %_{pred}= Percent Predicted, FVC=Forced Vital Capacity, IC=Inspiratory Capacity, RV=Residual Volume, TLC=Total Lung Capacity, sRaw=Specific Airway Resistance, FeNO=Fraction of Exhaled Nitric Oxide, PC₂₀=provocative concentration of methacholine sufficient to induce a 20% decrease in FEV₁, mMRC=modified Medical Research Council.